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[For the "American Elevator and Grain Trade."]

THE SANTA FE ELEVATOR FIRE.

BY S. S. HUBBARD.

The Santa Fe Elevator at Chicago, burned on September 9, 1905, was a frame iron-clad house, with cribbed bins, resting on high wooden posts. A brick boiler and engine house, with fireproof Hess Pneumatic Drier, adjoined at the north end; while, 50 feet east was the bleacher, connected with the house by a tunnel above the ground. The capacity of the elevator was 1,500,000 bushels; and it was run as a cleaning, drying, bleaching and storage house.

The fire occurred at 2:24 a. m., when an alarm was telephoned in. Truck No. 8 and engine No. 41 were sent on a "still" alarm; but the 4-11 alarm was not sent in until 2:42, or 18 minutes later, which, no doubt, was too late to save the house.

There is some question as to the cause of the fire, but it is known that it started in a stand of elevators at the south end of the building, the first intimation of trouble therein being the odor of burning rubber, which was detected at the elevator head. A man went to investigate, when, suddenly, the belt parted and fell to the bottom of the elevator, probably all ablaze, thereby causing fire "to appear in the bottom of the house, as soon as it was discovered in the top," as one man put it.

There might have been some obstruction, such as a broken bucket, to have stopped the belt, which would generate heat enough to set itself afire by the action of the bucket pulley, which would continue to revolve inside. It could not have been started by a friction pulley in the head, which is the cause of so many fires, as the pulleys were all geared. There was no "choke-up," as this stand, although running, was not receiving grain. A newspaper report gave the cause as a "splitting" of the belt, allowing it to rub against the leg. This is very doubtful, as it was

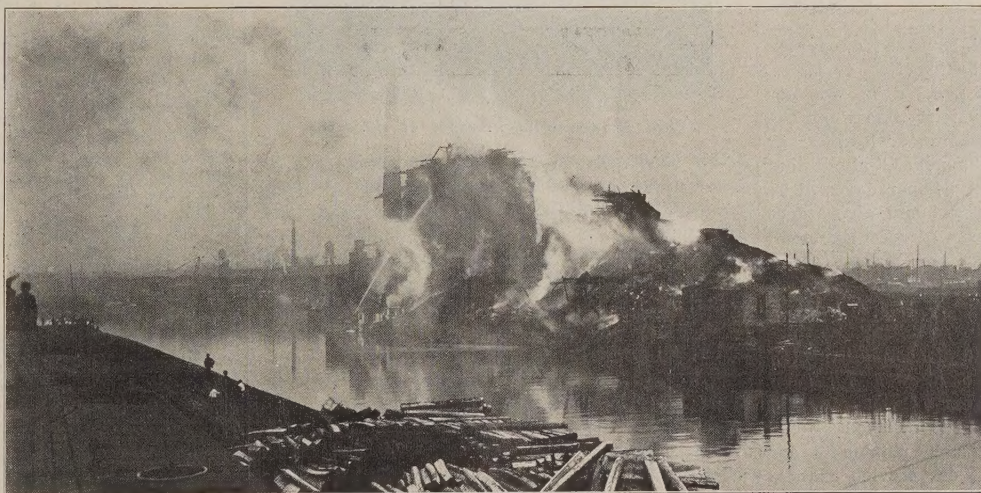
made of rubber with a heavy cotton web. An explosion also was mentioned as the cause; but, admitting the chance of spontaneous combustion of dust, it certainly was not the cause, as it could not have occurred in new dust, and there was no old dust, the house being filled with new grain. It could hardly have been started by a hot journal, as all the bearings were equipped with a journal alarm system, which did not register until after the fire got started, when the alarms did signal, one after another, beginning with the one at the elevator head in which the fire started.

the daytime, when every part of the house is light; therefore, there is a great chance of a "choke-up," or any one of the many accidents an elevator is subject to, occurring without being discovered in time.

From careful investigation, the following seems to be the direct cause of the fire, viz.: A crooked belt in the elevator stand. This belt had been on for years and was continuously watched, the bucket pulley being tipped, so that the belt would run clear of the leg; but the chances are that in the rush of business it must have been neglected,

allowing the belt to rub against the inside of the leg, creating heat enough to cause the fire.

This was about the best all around house on the Chicago River for commercial purposes; for there was ample depth of water for any boat that could get over the tunnel at Van Buren Street, only the night before the fire, the large steel steamer "Orr" having left the elevator with 110,000 bushels of grain; and, too, there is no current here to hinder getting in or out of the slip, as there is at some of the other elevators. The vessel people say that it was about the quickest elevator on the river to



RUINS OF THE SANTA FE ELEVATOR AT CHICAGO.

There was plenty of water on the floor, and the superintendent stayed in the building, fighting the fire, until his means of escape was nearly cut off. The men were unable to get into the elevator head and there was a serious delay in getting the fire department fully at work, both on account of the tardy general alarm and the elevator being located in a position hard to get at and at a long distance from water plugs; although there always arises the question of any fire department being able to cope with an elevator fire after it has once got under way.

The elevator was busy and running all night up to the time of the fire, which should only be another plea against running an elevator all night, for the house cannot be kept clean and the men surely will not attend to their duty as well as in

load and unload at. In the month of August, it handled 3,500 carloads of grain and during the season handled more grain than any other house in Chicago. The elevator was nearly filled at the time of the fire and was busy, as will be noted by the above. It will be rebuilt at once, by the owners, the Atchison, Topeka & Santa Fe Railroad, and will be operated by the Harris-Scotten Co., who were the lessees when it burned. They also operate the "National" and "Union" elevators here.

The elevator was practically a total loss, the only part saved being the power plant, drier and bleacher. The salvage grain is being dried at the "Iowa" elevator, and indications are that it will return to the insurance companies between 50 per cent and 60 per cent gross.

About the best lessons to be learned from the above fire are these: Do not run at night; have all machinery about an elevator carefully watched while in motion, eternal vigilance being the price of safety; construct elevator heads so that they may be reached and opened easily; construct elevator legs of iron, or, at least, line them with iron; as often as once each week, see that all bucket belts run true; be sure to keep all bearings well oiled and clean; have a fire-alarm box at the risk, and, when sending engines to an elevator fire, always remember the caution, "Don't send a boy to mill," and when it is seen that the fire is beyond control, after closing all wall openings, open every slide in the spouts leading from the bins, allowing the grain to fill up the first floor, thereby increasing the chances of salvage; use 1½-inch instead of 2½-inch hose on standpipes, as the latter is more difficult to handle in every way; do not allow men to stay fighting the fire too long in the Texas, for the lightning spread of the flames is likely to sacrifice human life, which is uncalled for.

Now a word to insurance companies writing elevators: Do not carry the liability with the idea that the business is as good as former records have shown, for surely the class does not deserve it, as total losses are almost certain, on account of the open construction and the many flue holes therein; and where the bins do not rest on the ground there is less chance for salvage than where they do; while the almost universal introduction of cleaning machinery and the disposition of the elevator people to economize in the quality of lubricating oils and to run short-handed, puts the whole lot into another class of hazards, with but small prospect of profit to the underwriter.

CANADIAN CAR SERVICE.

A Canadian Car Service Bureau has been organized to have jurisdiction over all the territory east of Port Arthur, Ont. The old rules are still in force in this territory, but a new set is under discussion by the representatives of the roads in the territory, which will no doubt be promulgated in the near future.

The demurrage charge will be based on a rate of \$1 per 24-hour day, to begin after 48 hours, free time counting from noon and 7 a. m., and not counting Sundays and holidays nor time when the weather will not permit unloading or loading; or when cars are unreasonably "bunched," allowances will be made as necessary. A 24-hour day will be allowed in which to pay charges and give orders for placing or delivery. In case of reconsignment, the original consignee shall pay any charges accruing when the party taking delivery consumes the 48 hours' allowance of free time. "Cars held in transit for inspection, cleaning, bagging, completion or change of load, change of destination, etc., and detained over the time allowed for such purpose, will be subject to car service charges, which must be billed forward as directed by the accounting department. If such shipments are transferred to other cars, the car service charges will follow on the cars to which transfer is made. The forwarding agent, or, in the case of change of destination, the agent by whom arranged, must make the following notation on the bill of lading: 'Subject to car service charges at.....' The amount must also be inserted in the 'back charges' column of the bill of lading, when practicable."

Claims must be filed with the manager, J. E. Duval, 121 Board of Trade, Montreal.

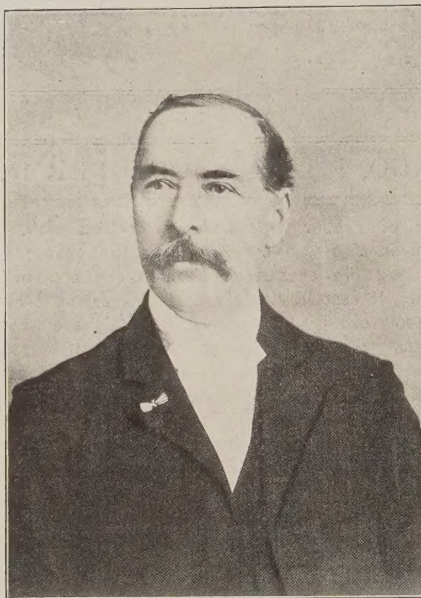
Consignments of seed have paid handsomely this season. A good many shippers do not like to consign, preferring to sell by sample, but well posted shippers know that there is not a dealer here or elsewhere but who discounts deferred shipments anywhere from 15 to 30 cents per bushel; and we figure you are just as able to take that chance as they. Most of the lots they do not hedge against but take their chance on arrival. We still feel that consignments will continue to pay the

best all the season through. We would not advise holding it at home, but let it come along as fast as you buy it, and in that way you strike a very good average, but you also gain the discounts the shippers bid here on deferred shipments.—Zahm & Co., Toledo.

ORRIS J. MILLER.

As the man who has charge of the inspection of grain at St. Louis, Orris J. Miller, chief deputy grain inspector of the state grain and hay inspection department of Missouri, is an individual of more than passing interest to the vast army of grain shippers who consign to that great terminal market.

Mr. Miller is a native of Missouri, having been born in Millersburg, Callaway County, and has for most of his lifetime been a resident of the state. He began his business career as a traveling salesman, and for some years represented the wholesale dry goods house of Wear & Hickman of St. Louis on the road; and, as a special mark of that



ORRIS J. MILLER, ST. LOUIS,
Chief Deputy Grain Inspector of Missouri.

firm's confidence in Mr. Miller, he was sent by the firm to close up for them an important business affair at Salt Lake City, which required several months.

Afterwards Mr. Miller went into the grocery and commission business with his brother, J. E. Miller, at Rocheport, Mo., and still later was for a number of years engaged in the wholesale and retail grocery business at Nevada, Mo.

It was at Rocheport, Mo., that Mr. Miller for many years handled grain, shipping it to the St. Louis market, and thus becoming intimately familiar with grades he was soon regarded as an expert judge of grain; and it was this knowledge that commended him for the position he is so satisfactorily filling in one of the largest grain markets in the country.

The St. Louis grain office is entirely under Mr. Miller's supervision. He has inaugurated many improvements in the conduct of the office which have met with the hearty approval of both the buyers and sellers of grain.

CORN CONTEST.

Some time during the coming winter Kansas City will hold a function to be known as "The Trans-Mississippi Corn Contest," to which the President of the United States and other great men will be invited.

The affair was suggested by Thos. D. Hubbard of Kimball, Kan., who proposed to include in the exhibitors both dealers in corn and corn products and breeders of corn, as well as makers of the

implements used in corn cultivation. Another proposal is that of a series of addresses and discussions on the methods of corn production and sale.

At present the affair is in the formative stage only, but to all appearances there is promise that the outcome of the committee work will be an interesting and valuable exposition of corn in all of its various aspects.

PUTS AND CALLS REVIVED.

If a decision made by Judge Gary, of the Superior Court of Chicago, on September 21, shall stand the test of the higher courts, "puts and calls" may be declared legal in Illinois, in spite of the law to the contrary. The substance of the decision is that an offer to contract for the sale of grain, where an actual delivery is contemplated, and an agreement to keep the contract open for twenty-four hours—in Board of Trade language, a "put and call" contract—is not a violation of the criminal code.

The decision was given in a suit brought by Mark Bates, a Board of Trade man, against a fellow member, Harry Woods, who had refused to abide by an offer to contract for the sale of 60,000 bushels of wheat. The offer to contract for the sale of the wheat at 82½ cents a bushel was signed by Woods on September 13, the offer to remain open until the next day. The price of wheat rose to 83¼ cents next day, and when Bates offered to make the contract Woods refused and suit was brought for the difference in the price of the wheat, Bates alleging that he had been forced to buy 60,000 bushels on the open market.

The documents in the case were as follows:

Chicago, Sept. 13, 1905.—I, Harry Woods, hereby offer to contract for the sale to Mark Bates of 60,000 bushels of regular contract wheat on the Board of Trade, in the city of Chicago, at 82½ cents a bushel, same to be delivered in the month of December, 1905.

HARRY WOODS.

In consideration of \$60 I hereby promise to leave the above offer open for acceptance until the hour of 1 o'clock and 15 minutes p. m., Sept. 14, 1905.

HARRY WOODS.

In speaking of the consideration, Judge Gary said:

The consideration in the matter is for the promise to leave the offer open, which offer is to make a bona fide contract for the sale and actual delivery of wheat. If the offer is one such as is prohibited by statute, the party giving the option would leave himself open to indictment and criminal prosecution. An indictment would clearly not lie on the facts in the case, and unless it would the statute cannot be interposed as a defense, because the statute makes it a criminal offense to contract for an option, and unless an indictment would lie the defense cannot be held good.

The case will go to the appellate courts.

In the meantime, and in the face of threats by certain members of the Chicago Board, trading on the new "contracts for indemnity" was begun on the curb on Tuesday, October 3, the trading for the day aggregating 1,000,000 bushels of wheat and 100,000 of corn. It is proper to say here that only a few of the larger commission houses have done any trading in the documents, the others announcing that they would wait until the higher courts had passed upon the Gary decision before taking any chances. There is some doubt as to whether the decision will hold, and the Board's directors, after having had this before them, referred it to the committee on legal advice before taking action.

The Milwaukee Chamber of Commerce is, of course, watching the case with keenest interest, realizing that if puts and calls, in their new guise, should be revived at Chicago, all the Chicago business that has given the Chamber its recent boom will disappear.

Is 40 cents a very low price for corn? Is it a low price for a crop 500,000,000 bushels larger than the last one, which sold to 44 cents and played around 45 cents most of the time for four months? I think not.—E. W. Wagner.

It is the rule at Buffalo, made by the International Longshoremen's Association of Grain Shovelers, that when a scooper is injured while at work his pay goes right on at the highest rate paid anyone working at his elevator.

[For the "American Elevator and Grain Trade."]

GRAIN INSPECTION.

BY H. W. KRESS.

Grain inspection seems an easy and simple matter, but let a shipper be around the railroad yards here in Toledo for two months and he will learn things that will surprise him. Mr. Culver, chief grain inspector, has seven assistant inspectors, who are all men of experience. Toledo has also an inspection committee of seven from the Produce Exchange, who can be appealed to from the chief and deputy inspectors in cases where the shipper is not satisfied with the grade placed on his grain. The inspectors are men who appreciate the fact that they are not merely working for a salary, but that they are also placing a valuation on property that is of vital importance to the shipper, not only from the standpoint of dollars and cents, but in that they feel the shipper also is a judge of grain as well as themselves.

Some of the cars that are coming in have the appearance of a lumber yard, and others as if they needed a lumber yard to make them fit for grain. I am seeing cars that make me smile and frown. When an inspector starts out to grade forty or fifty cars and finds about ten of them nailed to the roof with grain doors—some double at that—making you wonder how the man got out of the car who coopered it, this is very provoking to the inspector, as it means the using of crowbars, which requires a great deal of time and delays their work. If the shipper would take the door that he puts on the top and put it on the bottom instead, he would find fewer shortages. Of course, we all know that cars loaded with oats require extra boarding, but when it comes to wheat, corn or rye it is very foolish for the shipper to board his car to the roof. If the shippers could see the bulged condition of a great many cars of wheat and corn loaded to the roof—no matter how good the condition of the car—they certainly would hesitate to repeat the same. These are the familiar cries I hear when on track: "Leaky grain door," "door bulged," "leaky sides," "leaky ends," "leaky bottom," "leaky draw-head," "bad door post," etc., until at night I have gone to bed and in my sleep kept on dreaming and calling the same old story.

The shipper should be more careful in examining the roofs, for if the car is caught in a heavy rain it looks as though the shipper started to run water as the last draught into the car. These same cars, if they are on the road too long, are graded off according to the deterioration of the grain. And to tell you what the shipper says when he gets his grade—judging from myself—would not look well in print.

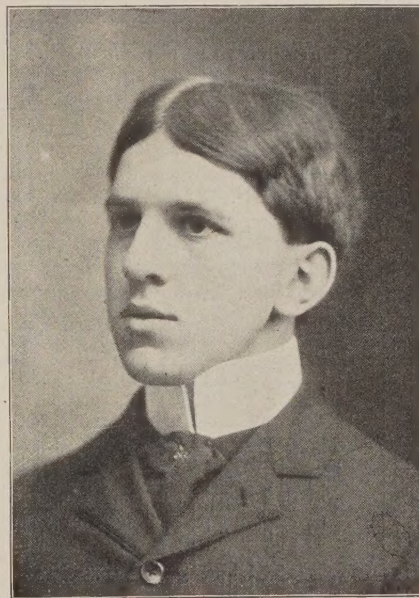
The bulk-heads that are coming into this market are frights in a great many instances, and are built as though they were intended to haul sawdust instead of grain. In fact, it would pay, in some cases, to load the grain in separate cars and pay the difference in freight. I would say there is about one good bulk-head out of every five that is arriving in a condition where there is no mixture.

One of the strong points in favor of the Toledo market is the blowing feature. When cars arrive here in a condition where the inspector finds he can give the shipper a better grade, he orders the car to be blown. I do not know of another market where this is done without orders from the shipper. I have often wondered whether the shipper really realizes what this means to him in the way of dollars and cents. This is especially so with wheat, as the screenings have a value. Taking oats, however, it would be better for the shipper to clean them thoroughly before sending them to a market. For example, we will take a car of oats containing 1,800 bushels. This car, we will say, contains 1,200 pounds of screenings, which are of no value. The freight on the screenings at 8 cents per hundred is 96 cents; the cost of recleaning at 1/2 cent per bushel, \$9, making a dead loss of \$9.96. This is not a rare occurrence, but is happening every day. We must also consider that the shipper is paying

the farmer for a lot of trash for which he receives nothing in return.

There are things which are provoking to an inspector. As I have said before, one is plugged cars, and there is nothing that gets the inspector "up in the air" so quickly as to find such cars. I want to say to every shipper, for his own good, put your bad grain on the top of the car, or at the door, where the inspector can see it first. His first idea will be that it is a bad car, but, plunging the trier to the bottom of said car and finding good grain, he is agreeably surprised, and you have his goodwill. This may sound like fiction to some, but I know it to be a fact. A shipper is shown no mercy when he has his car plugged with inferior grain, as his whole car is subject to the grade of the worst that is found in the car. This does seem hard, when we stop to think how little some farmers consider getting the best of us in this same respect; but that should not lead us to follow him as our standard bearer.

Taking up the subject of how cars are weighed and unloaded at the elevators, I will say that I have



HARRY W. KRESS, MIDDLETOWN, OHIO.

been agreeably surprised to note the care that is taken in this respect. Take Wabash Elevator No. 5 as an example: The grain is unloaded into a receiving hopper and is thence run to the hopper scale. The shovelers who unload cars here are not paid by the day, but for the amount that they unload. My observation leads me to believe that this is not the best way to employ these men, as it is apt to make them careless in the matter of unloading cars, in their haste to get all that they can to their credit. One can hardly blame the men for this, but, then, it is not doing the shipper any good. Have I noticed cars that have not been swept properly? Yes, of course I have; but I am glad to be able to say there were not many bad ones. In fact, the amount of grain I have found left in cars practically amounts to nothing worth consideration.

The way in which some of the cars are boarded on the inside to prevent the grain from getting between the linings is a caution. I would advise shippers to stop boarding up the bottom of linings if they want all that is coming to them. They will board up the linings on the bottom and leave openings on the top, in the way of brace-rod holes and cracks, which allow the grain to be sifted in behind the linings. Of course the shovelers tear this construction apart when it is possible to do so without affecting the original lining, but the railroad holds them responsible if they damage the cars, and they act accordingly. It will probably interest some to know that the grain that can be stored away in the linings this way would average from twenty to thirty bushels very easily—yes, and "then some." Of course, I understand that the shipper's reason for boarding

up the inside lining is that, practically speaking, the outside lining of the car does not look good to him; but this kind of cooping is really impracticable for reasons mentioned above. The shipper had better refuse to load such cars. But, then, consider his predicament, when he has sold his stuff on a time shipment and has nothing better in sight to load and a declining market to work on. This is a time for a shipper to sing:

I've got a feelin' for you,
All goin' out and nothin' comin' in;
My spirits are low,
And I feel mighty blue;
Indeed I do.

I know that it is not all a "bed of roses" that a shipper has to rest on; judging from my own experience, there is a tangible addition of thorns.

Another thing I wish to mention is that a shipper makes a mistake, when putting in double grain doors, by not putting the even sides face to face, thus preventing the grain getting in between the doors, for on unloading the car at the elevator only one grain door is removed.

The East Side Iron Elevator differs from Wabash No. 5 in that it has covered track scales, and the shovelers are paid by the day. I have noticed that the cars are cleaned better here, and there is nothing found in the cars worth mentioning. The East Side Iron Elevator has no regular car sweeper, as is the case at Wabash No. 5. I want to say, however, that all the elevators, including Wabash No. 5, can certainly be proud of the manner in which they do their work.

The scales here at Toledo are all examined by Mr. Poore, an expert scale inspector, who is employed by the Toledo Produce Exchange constantly. He is around at all the scales and watches them very closely. The weighmen at the different elevators are all sworn and subject to immediate dismissal. Another thing for the shipper to understand is that the inspectors and weighmen do not know whose grain they are handling, and it would be foolish to think that they cared. There are no politics or graft in this market, and I know the shipper is given every consideration. Of course, as to the difference in price allowed on the different grades, as compared to other markets, I cannot state with any authority, but the shipper who sends his stuff to this market can judge of that for himself.

Now, the question of equipment is one of the leading issues of the day, and is of vital importance to the shippers of grain. The shippers of other commodities may have their troubles with exorbitant rates and discrimination, but the grain shippers have not only these things to contend with, but also a line of equipment that is not fit to haul coal, let alone grain. I say that the railroads must give us some consideration or the grain shippers will be bereft of their senses in addition to their bank accounts. I see cars coming in that have been hammered and pounded around in transit until the leaks give one the impression that they are sand cars to keep the tracks in good condition. I say that the agent at every station should be given orders to examine the cars that he gives shippers to load; and then, if he allows the car to be loaded and the cars, after arriving at destination, are found to be leaky or damaged, the railroad company should make good the shortage. The following are some of the questions which I asked of one of the superintendents of a road that carries a goodly portion of grain to this market:

Q. How many watchmen in each yard? A. One or more, with detectives.

Q. How many car inspectors? A. Two.

Q. How about cars totally unfit for grain? A. Marked and sent to the repair track.

Q. Are conductors or brakemen of freights supposed to patch cars if leaky in transit? A. Yes.

Q. Are they supposed to report such cars, and to whom? A. Yes, reported to the superintendent.

Q. Are they to report cars with seals broken? A. Yes, to the superintendent.

Q. Are agents at country stations allowed to let shippers load bad cars? A. The railroad company's books of rules hold the shipper responsible.

Q. If cars in the yards have appearance of being broken into, to whom are they reported? A. The superintendent.

Q. Do you keep a record of cars that your car inspector finds unfit for grain, also condition when found? A. Yes, in superintendent's office.

The shortage question is one that, to my mind, has been created mostly by the railroads with their equipment, which is a farce. What is the remedy? We shall have to come to a state of mind in which we shall oppose such a condition as this, not because it compels us to lose dollars, but because it is forever wrong, because it means anything but a shipper's just rights. Until we are willing to admit that what is in fault here is a principle vital to our liberty and progress and until we are willing to make sacrifices for that principle, and to stand for it through any chance of personal loss, we do but waste time to cry out against these evils. And, furthermore, unless we keep up the spirit of our state and Grain Dealers' National associations' work we will continue to have the same conditions, for as individuals we cannot expect to accomplish anything along the lines we are working. As to the immediate prescription for the evil, the best available medication is through the railroad problem. Deal with that and you deal with the other.

How will we solve the railroad question? Certainly not by passing more laws about it. A power that is able to override, defy and nullify the existing statutes will not be awed by any of our charges, which, to them, resemble nothing more than paper bullets, and it is anything but lunacy to suppose so. We have laws enough now, and with the railroad companies' books of rules, etc., we will find their impregnable armor. What difference does it make if the cars arrive in a damaged condition? The firm makes the claim; the railroad does not allow it. Whose business is that? How can the fraud and lawlessness be proved? How can it be detected when cars are damaged in transit? Even if some railroad clerk or employe of the station where the cars were loaded would reveal the fact that the cars were in good condition when loaded, the railroads, under present methods, could laugh the shipper out of court.

Some propose to enlarge the powers of the Interstate Commerce Commission; others propose to establish rate-regulating courts; some propose a special session of Congress; and others propose this law or the other. To the political mind these are beautiful pleasantries. The simple and sure solution of the transportation problem which I advocate is that of Judge P. S. Grosscup of the United States Circuit Court of Appeals—the only efficient plan proposed that is absolutely just to the shippers and the carriers, and which is endorsed by the leading manufacturers, shippers and consumers throughout the United States.

The following are the initials and numbers of cars which I have noticed being good examples of leaky and bad cars. There are lots more, but these are some of the bad ones:

C., H. & D., 10,703, oats, very bad, leaky ends; P. M., 28,005, oats, leaky sides; H. V., 30,542, bad inside linings; L. E. & W., 5,412, bulk-head, oats and rye; H. V., 30,339, bulk-head, rye and oats; Wabash, 61,139, leaky door and sides bulged; Wabash, 64,357, corn, bad grain door; Wabash, 64,252, corn, door bulged; Rutland, 6,579, wheat, plugged car; Wabash, 61,168, corn, leaky side; Vandalia, 9,867, side and end leaky; Wabash, 61,039, leaky side; M. C., 43,036, leaky end; P. & L. E., 30,980, leaky grain door; Wabash, 62,791, leaky door, post and sides; Wabash, 50,524, leaky ends; N. Y. & H. R., 16,848, leaky bottom both ends; Grand Trunk, 39,003, leaky door; Wabash, 62,707, leaky grain door; P. R., 98,748, corn, two leaky grain doors.

There are some things still in my notebook which I have not touched on, and if the question arises and I am still in Toledo when the corn crop commences to move, I shall possibly give the same to my fellow shippers, and some idea as to how the new corn is arriving at this market.

Send us the grain news from your neighborhood.

[For the "American Elevator and Grain Trade."] COMBINED AUTOMATIC TRANSFER WEIGHT RECORD AND BANK CHECK.

BY J. B. E.

Systematizing of accounts is receiving not a little attention by the larger grain houses, and many labor and time saving methods have been adopted to simplify the recording of transactions as well as to help eliminate the liability of errors. S. D. Palmer, an auditor of accounts of Chicago, who has revised the account systems of a number of grain firms, has invented and patented the station purchase and weight record of a line

there is a record on the back of the check of the entire transaction at the station.

The weight record blank for each check, or transaction record, has spaces for from one to forty-five wagonloads of grain.

WOULD STOP SQUEEZES.

In response to the Millers' National Federation resolutions on corners and squeezes, which do so much to disorganize the milling business as such, Secretary W. J. Langson of the Milwaukee Chamber of Commerce makes the suggestion that—

"The surest method of abolishing the evil would be to make warehouse receipts at all Lake Michi-

Fig. 1. Palmer's Combined, Automatic Transfer Weight Record and Bank Check. Patent applied for. Name: Station: 190. Address: 1798. Table with columns: Gross, Tare, Tot, Gross, Tare, Tot, Gross, Tare, Tot, SUMMARY. Rows for Total Gross, Total Tare, Net, Grade, Bu. @, \$.

Fig. 2. Table with columns: Gross, Tare, Tot, Gross, Tare, Tot, Gross, Tare, Tot, SUMMARY. Rows for Total Gross, Total Tare, Net, Grade, Bu. @, \$.

Fig. 3. Choctaw Mill & Elevator Co. Station: 190. No. 1799. Pay to the order of \$ Dollars. Choctaw Mill & Elevator Co. BUYER.

house with bank check, shown in the illustrations. Their use is designed to do away with the old method of individual scale checks and the duplicating of stubs attached to bank checks.

Fig. 1 is the station man's record, and is kept in his office. Fig. 2 is a duplicate of No. 1 and is made by the manifold process by the use of carbon paper. On the reverse side of Fig. 2 is the bank check, shown in Fig. 3.

When the manager of the line company's station elevator makes his original entry of gross and tare weights, it is transferred simultaneously to the back of the bank check, and when the check comes to the home office it shows exactly what the money was drawn for; or, in other words,

gan ports deliverable on the Chicago market. This lies in the power of the Chicago Board of Trade.

"If such a step was taken, elevators would spring up in Milwaukee and the other lake ports almost during a night. Such a precedent has already been established, for the New York Produce Exchange made Buffalo warehouse receipts deliverable on its contracts, and since that time they have not had a wheat corner in New York City. Where so many elevators are regular, it is simply impossible to hold the grain as it is done in the Chicago warehouses and thus control the price.

"But such a step would mean the loss by Chi-

cago of its prestige as the great world wheat market," continued Mr. Langson, "and Milwaukee, Manitowoc and other Michigan ports would gain."

Who, then, expects Chicago to endorse Mr. Langson's proposition?

[For the "American Elevator and Grain Trade."]

FREIGHT RATE LEGISLATION.

BY F. S. RUTHERFORD.

Mr. George R. Peck, general counsel of the Chicago, Milwaukee & St. Paul Railway on the evening of April 12 last, in an address before the Union League Club, Chicago, is credited with the following expressions:

1. "That rebates and discriminations by railroads are things of the past; that the matter of rebates is an obsolete and abandoned evil; that it is dead and gone to its long home."

2. "That giving preference to one shipper over another is not illegal at common law."

3. "The anomaly of the present situation is that the law requires competition and prohibits the steps necessary to procure it. If railways compete, they are seized by the interstate commerce law; if they do not compete, they will fall into the hands of the anti-trust law."

4. "If Congress can fix the price of a mere incident of commerce, the carriage, can it not regulate the main elements, the buying and selling price? If Congress fixes the price of hauling articles of interstate traffic, is there any reason why it should not fix the compensation of brokers employed in such traffic?"

5. "Power to regulate commerce conferred upon Congress by the constitution was subject to the limitation that no preference should be given by any regulation of commerce to the ports of one state over the ports of any other state. That under this limitation it was inevitable that government rate-making could only be carried out upon the basis of a distance tariff, which, while it would be within the provisions of the constitution, would be hopelessly destructive of the commercial and industrial fabric of the country, which has been built up under the adjusted system of tariffs, under which a scientific attempt has been made to equalize the disadvantages of geographical location, and place the different producing sections of the country on as near an equality in the markets to which they ship as possible."

Rebates and Discrimination.—The contention of Mr. Peck with reference to rebates and discrimination is refuted by the action of certain Western railroads last winter in promulgating "midnight" tariffs on grain shipments from Missouri River territory to Gulf ports, and by the action of those roads at that time of granting rebates to certain shippers in the guise of an "elevator charge allowance," these "midnight" tariffs and rebates resulting in the concentration of the Western grain trade into the hands of some four concerns and absolutely precluding the possibility of competition for this business, for at least two months, by any other firm or individual in the United States. Chicago, St. Louis, Peoria, Kansas City, New York, Boston, Baltimore, and all other markets of this country, for two long months, were discriminated against by these "midnight" tariffs and "allowance for elevator charges" instituted for the benefit of less than a half dozen firms. Later on in the winter the Atlantic seaboard lines took steps to secure a share of the corn shipments originating in Missouri River territory, and they accordingly reduced rates to Atlantic seaboard cities.

And it is further demonstrated that "discrimination by railroads" is not a thing of the past, in that, while for weeks the rate on corn from Omaha to Baltimore was 11½¢, the rate was 14½¢ per hundred pounds from East St. Louis to Baltimore, the prevailing rate from Omaha to Gulf ports then being 11 cents. For four months the railroads discriminated against the primary markets of the country in the interest of a very few firms engaged in the export business.

Second. Mr. Peck's utterance, that "giving preference to one shipper over another is not illegal at common law," seems to be with the authority and voicing the sentiments of those in charge of traffic for the different railroads of the country, illogical and unjust as it is. And this having been the policy and practice of the roads in the past, and as they avow belief in its legality, it is apparent

that drastic legislation is demanded for the protection of the great majority of shippers who are not on the "preferred list" of the railroads.

Third. Mr. Peck says: "The anomaly of the present situation is that the law requires competition, and prohibits the steps necessary to procure it. If railways compete they are seized by the interstate commerce law; if they do not compete they fall into the hands of the anti-trust law." There are two kinds of competition—fair, open competition, and unfair, underhanded competition. Fair, open competition never has and never will render the railways liable to seizure by the interstate commerce law, but underhanded, unfair competition, that discriminates against persons or localities, justly merits prompt and vigorous prosecution by those entrusted with the enforcement of the interstate commerce law. If by non-competition is meant unlawful combination of the roads, then their falling into the hands of the anti-trust law is only natural and just, but if by non-competition is meant indolence or lack of enterprise on the part of a railway to lawfully secure its share of business, the anti-trust law will have no terrors for it, but in all probability the bankrupt's court will.

Fourth. Mr. Peck suggests that, "If Congress can fix the price of hauling articles of interstate traffic, it can and should, as well, regulate the elements—the buying and selling price—and fix the compensation of brokers employed in such traffic." With the exception of those cases where the buying and selling price is arbitrarily established by combines and trusts, the buying and selling price of commodities and compensation for individual services are naturally and equitably regulated by the law of supply and demand, rendering congressional action in the premises unnecessary. But government control of the railways in the matter of rate-making is proven necessary for the protection of the interests of stockholders of the roads and of fully 99 per cent of the shippers. Those officials in charge of traffic who continually grant special concessions to certain favored shippers, or periodically, for a season, openly cut rates to a non-paying basis, need the paternal guidance of government control to the end that the rightful earnings of the company shall not be sacrificed to the plausible arguments of cut-rate seekers. It is evident that some branch of the government must have the rate-making power to the end that all may be enabled to engage in business on equal grounds. Developments last spring in the investigation of the Santa Fe road's rate conditions in Missouri River territory last winter, and the recent admissions of certain packers that they had received rebates from the railroads, should furnish sufficient proof of the necessity of entrusting the rate-making power to those who will patriotically and zealously protect both railway stockholders and the public.

Fifth. With reference to the contention of Mr. Peck, that because "the constitution in conferring upon Congress the power to regulate commerce," etc. (see 5 above), we will say: This claim of philanthropic practice by the railways in the interest of the different producing sections of the country is, unhappily, unsupported by the published freight tariffs of the roads.

The proportional rate on corn Omaha to St. Louis is 7 cents and to Chicago 10 cents per 100 pounds, the rate to Chicago being the higher because of its greater distance from Omaha. The rate on grain shipments from St. Louis to New York is higher than from Chicago because of the disparity in mileage. The charge for transportation of grain from Missouri River cities to the Atlantic seaboard is greater than to Galveston or New Orleans because of the shorter distances to the latter named points. The rate on corn between Chicago and Plattsmouth is 15 cents, while between Chicago and Alliance, Neb., it is 29 cents per 100 pounds, the C. B. & Q. rate-making in these cases evidently being carried out on the basis of a distance tariff.

Should it fall to the lot of a federal body to fix the rates for the railways of the country, and should that body be required by the provisions of the statutes to make the rates "upon the basis of a distance tariff," there would be no departure from the present and past rule of procedure in vogue among the railroads. Mr. Peck to the contrary notwithstanding, the railways have not "equalized the disadvantages of geographical location and placed the different sections of the country on as near an equality in the markets to which they ship as possible." It is an indisputable fact that the railroad charge for transportation of corn from Alliance, Neb., to Chicago is about 8 cents a bushel more than from Plattsmouth, Neb., to the same market. True, the disadvantages of geographical location for the farmer living near Alliance are equalized, but because the cheapness of his land so far from market enables him to raise corn cheaper than the farmer growing corn on higher priced land, rather than by any "scientific attempt" of the railways.

Rate-making upon the basis of a distance tariff, as would be likely with a federal body so empowered, would not "be hopelessly destructive of the commercial and industrial fabric of the country," or it would seem that the railways should not have carried out the same principle in adjusting their tariffs. Should the federal body, calculating the disparity in mileage, name a higher rate on corn from Omaha to New York than to Galveston, Chicago or St. Louis, no injustice or financial loss would result to either the Western producer or the New York market, plainly for the reason that corn is naturally salable at a higher price in New York than in the other markets named, and the producer in Nebraska, realizing a higher price for his corn in the New York market, is enabled to pay a greater cost for transportation thence than to the cheaper priced corn markets. The higher price ruling in New York for corn results from natural conditions, such as lower ocean freights to Europe, and the heavy demand for grain in populous districts. In making the rate from Missouri River territory higher to New York than to New Orleans, upon a distance tariff basis, the federal body would only be acting fairly; the lower rate to New Orleans than to New York could not discriminate against the latter named port, for the reason that it is nearer to Liverpool some 1,800 miles and to Cadiz some 1,400 miles than is New Orleans. Relative distances of the different ports of this country from the surplus grain sections of the United States and foreign markets would make imperative rate-making upon a distance tariff basis, so as to place all on an equality, and not give preference to the ports of one state over the ports of another state.

NEW SYSTEM SUCCESSFUL.

In order to inspect grain arriving at Cass Lake and Sandstone Yards on the Great Northern Road prior to its crossing the line into Wisconsin, the Minnesota inspectors have adopted the system of taking samples of the grain at the yards and making the actual inspections from these samples at the department's office in the Board of Trade Building at Duluth. So far as appears from the testimony of the inspectors themselves, the system has worked out very successfully.

On September 12, said Chief Deputy Inspector Emerson: "We had 489 cars of grain of all kinds; and we are now [before close of business hours, same day] all through with reinspection and appeals. The new arrangement makes it possible to save time and give better inspection in the light here. We hold no cars at Cass Lake or Sandstone longer than is required to obtain the samples. There is little delay to day trains, and the night ones are gotten out early in the morning."

D. M. Philbin, assistant general superintendent of the Great Northern Railroad, on September 14, among other things, said: "It would be impossible to devise a method of inspection which would give more general satisfaction. The report that there

is a tangle on the Great Northern because of the new inspection system is entirely without foundation. The new system is going along fine. There are no delays and no misunderstandings. The railroad company is having no trouble whatever. It looks to me as if the present system is a big improvement rather than a step in the wrong direction. It is my firm belief that no one interested would ever go back to the old system of inspection now, even if he were invited."

FUTURE OF CANADIAN WHEAT.

A report which has attracted not a little attention in Canada and Great Britain is one made by Prof. Mavor of the chair of political economy of the University of Toronto, on the wheat growing future of the Canadian Northwest. Prof. Mavor is credited with the highest qualifications as observer and analyst for the task imposed upon him by the British government; and while his inferences, or conclusions, have been questioned, his collation of established facts has been accepted by all.

Taking up first the topographical side of the question, Prof. Mavor quotes authorities, for whose knowledge he vouches, who divide Manitoba, Alberta and Saskatchewan as follows:

Area.	Acreage.	Nature.
1st.	36,000,000	Specially suited to wheat.
2d.	47,000,000	Adapted to mixed farming, including wheat.
3d.	28,000,000	Suited mainly for pasturage.
4th.	42,000,000	Rough. Partly suited to mixed farming.

153,000,000

By allowing for water areas, for wooded districts, for pasturage, for the proportion of land which must be left under fallow, for crops other than wheat, etc., these authorities bring the probable actual acreages down to the following:

Susceptible of settlement.	Annually available for crop.	Annually available for wheat production.
25,000,000	7,500,000	6,000,000
42,000,000	8,500,000	6,000,000
4,000,000	4,000,000	1,000,000
21,000,000	3,000,000	750,000
92,000,000	23,000,000	13,750,000

At 18½ bushels to the acre, the Manitoba average, the total yield of wheat thus will be 254,375,000 bushels. Of this 169,250,000 will be available for export.

Another estimate gives the wheat area as 22,432,000 acres, which, on the basis of Manitoba yielding 18½ bushels per acre and the other provinces 15 bushels per acre, would raise the entire wheat crop of the Northwest to 357,445,000 bushels.

Of course, estimates may be and are varied to suit the temperament of the estimator, so that, by a slight increase in the estimated average yield, the total yield might be raised to 416 or more millions of bushels. But what the average yield for a series of years will be, and what portion of the cultivated area will be devoted to wheat in the future are mere guesses. Prof. Mavor gives the following table showing the population needed to raise crops of various sizes:

Bushels.	Population needed.
100,000,000.....	360,000
150,000,000.....	540,000
200,000,000.....	720,000
250,000,000.....	900,000
300,000,000.....	1,080,000
350,000,000.....	1,260,000
400,000,000.....	1,440,000
800,000,000.....	2,880,000

The cost of wheat growing in the Northwest is estimated by Prof. Mavor at about 50 cents a bushel.

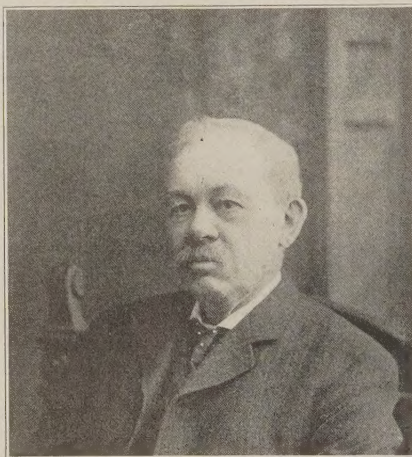
As to the disposition of the crop, Prof. Mavor regards Great Britain, Japan and the United States as the future buyers of Canadian wheat. Were Canadian grain admitted into the States free of duty, it seems probable that the United States would be competitors with Great Britain for our

products. Naturally, were Japan and the United States to become buyers on an extensive scale, there would be so much less for the British market, in which case Canada would become practically unable to meet the wheat requirements of the old country. But while it may be said that Canada could supply Great Britain with all the wheat needed to be imported there, it must be remembered that while the vast wheat fields of Russia and Hungary continue to yield more than the people of those countries consume, there will always be an exportation of wheat from those countries to England. The surplus of France also will find the same outlet. There is, therefore, very little, if any, probability of the old land having to rely wholly upon Canada for supplies of wheat and flour.

J. T. RAWLEIGH DEAD.

J. T. Rawleigh, a charter member of the Chicago Board of Trade, and its vice-president in 1892, died suddenly at his home in Chicago, on September 28, death resulting from heart failure.

Mr. Rawleigh was president of the wholesale hay, grain and feed firm of J. T. Rawleigh & Co., and although 69 years old was vigorous and strong



THE LATE J. T. RAWLEIGH.

and actively engaged in the business until he was stricken. He had been identified with the grain trade since 1855, in which year he came to Chicago and opened a grain and feed store in Market Street. This place was destroyed in the great fire of 1871, but a location was secured at Green and Monroe Streets and business resumed with a delay of but a few days.

Mr. Rawleigh was born at Deerfield, N. Y., April 6, 1836. In 1860 he married Miss Juliette Hosley, a Chicago girl, at New Buffalo, Mich. He is survived by his wife, a son, J. H. Rawleigh, and two daughters, Mrs. S. R. Warner and Mrs. A. F. Chapman.

Mr. Rawleigh took a great deal of interest in local politics and from 1876 to 1880 represented the thirteenth ward in the city council. He was also a candidate for mayor of Chicago, running against Carter H. Harrison Sr., and in spite of Mr. Harrison's immense popularity, he defeated Mr. Rawleigh by only a few hundred votes.

NEW ORLEANS EXPORTING.

W. L. Richeson, chief grain inspector of the New Orleans Board of Trade, returned to that city on September 10 from a trip through the western corn and wheat fields, and told the Picayune that—"I am assured that of this year's corn crop New Orleans will export enough to show, at the wind-up, that this has been the record year in this cereal. As for wheat Galveston seems to have the edge at this time, but I expect, a little later on, to see a large quantity of wheat carried through this port.

"Upon my return I find it rumored that three or four large grain concerns will handle the entire business which comes through New Orleans. I

think this is a mistake. I believe that it is the intention of the railroads to give every grain man in New Orleans a fair show when it comes to exporting grain."

In this connection it is interesting to note that Elevator E was called upon on September 9 to load its first export grain after its reconstruction, and reports received show that its workings were as smooth as could be wished. This shipment consisted of 30,000 bushels of grain loaded on board the Mechanician.

[For the "American Elevator and Grain Trade."]

HANDLING NEW CORN.

BY SCOTT.

New corn is ripe, but not cured; but as some farmers seem anxious to sell it in its uncured condition, we are again called upon to witness the troubles that fall to buyers and shippers of this kind of grain. As early as September 30 a car containing a thousand bushels of new corn was shipped from central Illinois to Chicago, and, as might have been expected, it spoiled before it reached its destination.

To the onlooker it would seem that grain dealers would learn by experience that it is not safe to ship corn so early in the season; or even, indeed, to buy it at a time when in the nature of things it is too green to shell with any economy. The experienced man who takes counsel of his experience knows well enough that in shelling green, uncured corn the cob breaks in pieces and that some of these from which the corn is not detached pass over the screen into the cob room and thence go to the boiler furnace or to the farmer's wagon to be taken home for fuel.

But not all are used for fuel by any means; for there are not a few farmers, thrifty and "onto their job," on the watch for snaps, who play the double role of seller of green corn for cash—at a good price, too, considering the amount of moisture it carries—and consumer of the cobs, which they generally get for nothing except the hauling. Then at home they put the children to work sorting out the pieces carrying corn which they feed to the hogs and the chickens. When this class of farmers can find a buyer green enough to take their green corn and give them the cobs, they are in their glory. All they lack of being hogs themselves are the bristles; and some have even those.

When a grain dealer begins buying this kind of corn by taking even a single load, as in the regular course of business, he at once opens the way for no end of it. The best way is to keep out of it altogether and avoid loss and trouble, making a firm resolution not to handle new corn until you are certain it is in fit condition to handle, and sticking to this resolve in spite of the many pitiful tales that play on one's sympathies to induce him to break his purpose.

Nor is it safe to compromise by taking a few loads of the stuff and cribbing instead of shelling and shipping it immediately, in the hope that by scattering it over the floor of the crib it will dry out enough to shell before the crib is filled in with cured corn. As a matter of fact, this green corn will be the last to come out of that crib, and if the floor is of the non-ventilated kind one is certain, when he does at last get at it, to find it moldy—black and blue mold; and enough of it gets mixed in with the sound corn to cut down the grading on hundreds of bushels.

Now, most old heads won't need this advice—may laugh at it as trivial—but there are always a lot of "cubs" who are not too far experienced to need a little advice, and who may not have learned yet that uncured corn shelled and stored in a tight bin or car will begin to heat within a very few hours and will be entirely spoiled for all commercial uses (except the distiller's) before one can realize that it has gone wrong. Even young men from the farms, who really ought to know, have to learn all this by experience when they go to buying grain for an elevator. So I sum it all up in a sentence: "Don't begin buying corn too soon, boys."

[For the "American Elevator and Grain Trade."]

FAULTY ELEVATOR CONSTRUCTION.

BY A TRAVELER.

The contrast that is evident in the internal construction of elevators is certainly remarkable. You will see two fine-looking new buildings, which, from external appearances, are both built on modern plans: a passing observer would class them both as first-class elevators. This brings out the fact that, in order to judge completely, one must be like the small boy who wants to see the "wheels go round" in the old clock. You must get to the innermost parts in order to pass judgment.

Even in a simple horsepower elevator I have found some of the worst conditions. A careful inspection is necessary in every case. In the elevator in mind the principal trouble was in the leg, boot and head, as is so often the case. Originally a built-up wooden boot, it had entirely rotted away. It was set in a hole in the ground, and, as the elevator happened to be in a low spot, there is water most of the time in the place where the boot ought to be. Grain from spouts would run into this hole after the elevating had stopped. Every time the elevator started it was necessary to dip out the accumulation of water and soaked grain before starting that from bins. This was always run into the car or bin, as the case might be, to spoil and deteriorate what grain it came in contact with. If one could start the old blind horse and have him perpetually in motion everything would be all right after the first stuff was scooped out; but that is hardly possible. Everyone knows that many stops are necessary during the loading of a car. In this case each stop means throwing a lot of wet and damaged grain and water in with the good grain.

To any thoughtful person this is a condition without excuse. Every boot should be placed in a metal pan or cement pit large enough to leave room around the boot to catch all leaking grain and to give freedom to clean it out. The pan must be high enough to come above high water mark. Let spouts loading into the leg be built tight, so as to confine all the dust possible. Even at the best, it is a hard place to get at, and there is often neglect in cleaning it out as often as should be—until the insurance inspector gets around. If the elevator is on high, dry ground, so that a pan is not necessary, it is best to have the entire basement cemented for cleanliness, to save what grain will scatter on the floor, and also to be rat-proof. If this is not done, at least there should be a cement space large enough to set the boot upon, so that it will be solid and free from moisture that will rot the bottom if the construction is of wood.

Following the elevator up from the basement, we find every cup badly battered and many gone. The belt lags on one side of the leg, which is so far from perpendicular that the cups strike in spots. In this case I find in the head a wooden pulley. The belt runs off the pulley an inch or two, so that it has worn a crease half through the head boards. The cups have scooped out a space of their size partly through side boards of the head. Occasionally a bucket must have caught and been jerked off. The pulley itself was either tipped, or the head had lopped against it, until it had nearly cut a circle out of the head. Certainly this took a good deal of poor Dobbin's power and was extremely liable to create friction which would result in fire, besides being so far from what any piece of machinery should be that it was painful to see it operate.

Still further—for we can follow this into the car and find defects—the throat for the discharge for the grain is small. It was clogged with straw, a bucket and a lot of wet grain from the boot. What was almost worst of all, it was so high up that when all was free and open not over half the grain went out of the cups into the discharge spout. The balance went down the bootleg, to be re-elevated over and over again. The man in charge had been raising the throat space in hopes of catching the grain that was getting away.

Now, the top of the tongue that connects the leg

and spout should not be above the bottom of the head pulley, and lower if possible. One should always see that this construction is correct if he wishes to touch a point of economy, be the power horse, gasoline or steam. It is a very common error of construction and one often not detected.

The next defect to complete the combination is the loading spout. It might have been large enough for clean, dry grain, but not the kind elevated here. It is too small and clogs, thus creating endless trouble. While the elevator head is at least 50 feet from the ground and should discharge grain to the end of the largest car easily, the position of the spout is such that an extra man is needed to shovel grain into the ends of cars.

It is surely safe to suppose that the owner of this elevator does not have any kind of a system of bookkeeping which shows what his profit or loss may be. If he knew that it was loss he would certainly get after the cause and eradicate it. He would not have to go far to find it, nor would it cost much outlay of time or money to make the change from loss to profit. This shows the neces-

In the Northwest also the best cars for the shippers are the new ones of 80,000 pounds capacity; but the roads insist that these cars shall not go beyond Minnesota terminals; and shippers to Milwaukee and Chicago must take anything else they can get.

Down East the situation is equally serious. Buffalo is becoming congested through lack of cars to get grain to seaboard, while all the coal carriers say they expect this fall and winter the greatest car famine in the history of the coal business.

THE OXFORD BEAN POLISHER.

Dealers who handle beans will be please to learn that the Oxford Bean Polisher, formerly manufactured by E. E. Wemp & Co. at Oxford, Mich., is now manufactured and sold only by A. T. Ferrell & Co. at Saginaw, Mich.

This machine, as the name implies, is used to polish or scour beans that have become discolored by rain, mold or dirt. It brightens up the



THE OXFORD BEAN POLISHER.

sity of having a system which will show at any time where one stands—a system by which a cut-off and balance can be easily made.

While this is an extreme case, it is no doubt a fact that some one or more of these points often occur, any one of which would be enough to require and demand radical treatment. I will give some details later of an elevator constructed on opposite lines.

CAR FAMINE COMING.

From all parts of the country comes already the complaint that cars are getting more and more scarce. In the Northwest the demand for cars for wheat is much in excess of the supply, and already elevators in the country are full to the limit at a great many stations. As early as September 26 telegrams from Minneapolis were to the effect that country elevator receipts were the heaviest on record and that the car blockade was fully established, with sidetracks filled with loaded cars. None of the lines are permitting any of their cars to leave their own tracks, while Eastern roads stop their cars at Chicago.

In the meantime there is a big demand for cars at Minneapolis for flour to the head of the lakes, the production of flour being enormous. For the week ending September 21 the shipments were 432,672 barrels, a total not reached since week of December 12, 1903, when 461,277 barrels went out.

surface and greatly improves the selling qualities and appearance of the beans. Beans raised upon clay lands are very apt to be stained, and this stain can readily be removed by this machine. The polisher is used with great profit by handlers of commercial beans, as well as garden seed stock.

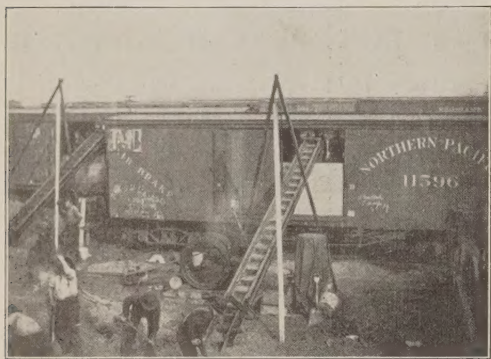
The accompanying cut gives an idea of the machine. It has a cast-iron frame and is very substantially built. To give a technical description here would require too much space. Suffice it to say in regard to the working of the machine that the soiled beans are automatically mixed with dampened sawdust, or other material, and subjected to a thorough scouring, after which they are similarly mixed with a drying material, such as wheat bran, and "rubbed dry," imparting a fine, natural shine to the surface of the beans. Full detailed description will be furnished by A. T. Ferrell & Co., Saginaw, W. S., Mich., on application.

The grade of wheat arriving at Northwestern terminals is unusually high this fall, 5 per cent grading No. 1 hard, while No. 1 northern is more in evidence than for several years.

A meeting of representatives of Canadian railroads, grain dealers, farmers and the Agricultural Department was held at Winnipeg recently to organize a movement similar to the seed train specials of our own West and Northwest.

NEW IDEAS IN HANDLING SALVAGE GRAIN.

The task of clearing away and handling more than 850,000 bushels of all kinds of salvage grain mixed in one conglomerate mass, with here and there timbers still blazing, the entire heap of grain—wheat, corn, oats and barley—water soaked, hot, fermented, fermenting and sprouted, a large part of it not yet spoiled, but all liable to be so inside of a few days, and over 150,000 bushels of

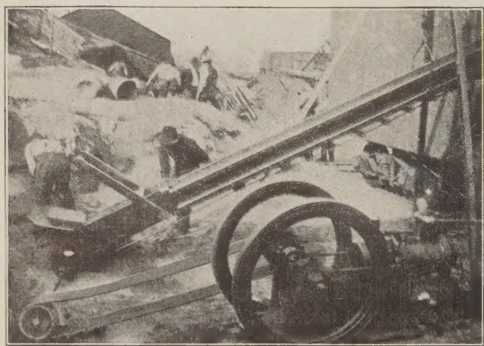


MARSEILLES GRAIN LOADER IN POSITION.

corn in the river—this was the salvage problem that confronted the Harris-Scotten Company, Chicago, a month ago.

Soon after the fire which wrecked the company's big Santa Fé elevator at Twenty-seventh and Wood Streets on September 9, the Harris-Scotten Company laid before the insurance adjusters a proposition to clear away the wreck and dispose of the salvage grain, but a week's valuable time was lost before the insurance men's acceptance came and work could be started, which but increased the difficulties of the problem. When the acceptance did come the work of clearing away the wreck was placed under the immediate charge of W. H. Perrine, F. P. Breckenridge and George L. Stebbins. The last named has charge of the sale of the grain at the elevator. Mr. Breckenridge looks after the work of loading the cars and directs the work of the men generally, while to Mr. Perrine principally is assigned the sale of the salvage grain on 'change and at outside points.

At first an army of men equipped with galvanized baskets, wheelbarrows and scoops was set to work loading the grain into cars and lighters moored at the dock. On the morning of September



GASOLINE ENGINE BELTED TO GRAIN LOADER.

22, however, seeing that this method would not meet the conditions of the problem, the company wired the Marseilles Manufacturing Company at Marseilles, Ill., for the immediate shipment of five of their portable grain elevators, with which it was hoped to handle the salvage more rapidly than the men were doing it. By afternoon of the same day one of the Marseilles Loaders was set up and working satisfactorily, a gasoline engine furnishing power. The following day four additional engines were mounted on skids to furnish power for the other four elevators, and when the entire five were in operation, the real work in hand had begun with a much smaller force of laborers.

Early this month, after the debris had been cleared away at the southwest corner of the pile of grain, a portable elevator was set in position to load the grain direct to boats.

With plenty of help the best loading record made, when the baskets and scoops were used, was about three and one-half cars a day. When the Marseilles Portable Elevators were installed and at work, the average for each elevator was five cars a day, and in a number of instances six cars were loaded. Considering the necessity of resetting the elevators as well as the gasoline engines and of pushing along the cars as holes into the pile of grain were enlarged, the loading of five or six cars a day by each elevator gang is considered a remarkably good record. Those who are directing the work are jubilant over the progress being made, and Mr. Perrine is authority for the statement that the portable elevator is the solution of the whole problem of disposing of the damaged grain:

On the water side, where it is estimated 150,000 bushels of corn were dumped into the slip, a tug fitted out with a large centrifugal pump was engaged in pumping the corn from the bottom of the slip into a canal boat. This corn is being dried by the Boynton Malt House at the rate of one boatload a day. In all there are seven driers at work, viz., two at the burned elevator, and one each at the Iowa Elevator, Wabash Elevator, Rockwell



SHOVELING SALVAGE GRAIN INTO LOADER.

Elevator, Boynton Malt House and the American Malting Company.

The two Hess Driers at the north end of the burned elevator were encased in a separate building and were not damaged by the fire. A temporary leg has been constructed outside of the drying house and spiral conveyors installed to carry the grain as it is dried to a boat in which it is carried to the Iowa Elevator, a lease of which the Harris-Scotten Company has taken to handle the salvage grain as fast as it is dried.

A great deal of the grain finds a ready sale on the Chicago Board and to members of other exchanges. Considerable grain is sold, also, to local dealers and consumers for use as chicken feed, etc., the grain being bagged on the spot. Prices secured for the grain range from 30 cents to 65 cents a bushel for wheat, 15 cents to 40 cents for corn and from \$10 a car to 20 cents a bushel for oats.

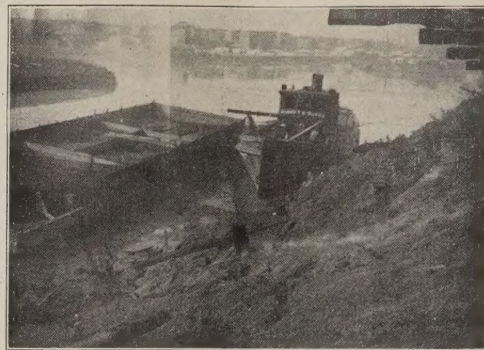
During the progress of the fire, as the bins broke the grain was poured out and mixed together, with the poor and damaged stuff spreading over the top. It is hoped that if this badly damaged grain can be gotten out of the way quickly, perhaps half of the wheat, especially, may be reached and dried with comparatively little deterioration. The major part of the corn is hot and fermented, but is not a total loss as it can be used in that condition for distillation. The largest proportional loss, so far as quantity is concerned, is probably on the oats, on which there is practically no salvage.

The Santa Fé elevator had been operated by Richardson & Co. as a private house for some time prior to May, 1904, at which time the Harris-Scotten Company secured control of it. A Hess Drier had been installed by Richardson & Co., and

a second one was put in by the Harris-Scotten Company. The drying capacity is from 25,000 to 30,000 bushels of grain per day. That these driers were uninjured in the fire is no doubt due to the fact that they were enclosed in a separate brick building north of the elevator and to the fact the wind was blowing strongly from the north.

AS IT IS IN WISCONSIN.

The new railroad law of Wisconsin would seem to have been made on the theory that no special



PUMPING SALVAGE CORN FROM RIVER INTO LIGHTER.

favours are to be given hereafter to any person or corporation, and it is said to be so thoroughly lived up to by the railroads that favorites are non-existent now in the Badger State. Recently, at any rate, a Milwaukee correspondent of an Albany paper was able to tell the following story of the "hardships" the law imposes on the shipping public:

They tell a story in Milwaukee of a barley dealer who is known as an ardent supporter of LaFollette, and a zealous foe of rebates and discriminations, who went to the Milwaukee agent of one of the railroads to arrange for the shipment of 200,000 bushels of barley. When everything had been arranged for the handling of the grain the shipper asked:

"Now, then, what concession are you going to make me on the storage of that 200,000 bushels?"

"Not a cent."

"What? Well, say, we can fix it upon the switching charges, can't we? How much will you throw off on the switching charges?"

"Not a cent."

"Well, surely you'll shade the rate, won't you?"

"Not a cent."

"Look here! You know I ship 500 or 600 cars of barley a year over your road. Do you mean to say you won't give me any sort of rebate?"

"We'd be very glad to do it, but we're not run-



SELLING SALVAGE GRAIN BY THE SACK.

ning the railroads any more. I'll tell you what, though; if you'll go to Governor LaFollette and get an order for us to give you a rebate we'll do it."

The follower of LaFollette took his departure abruptly, uttering remarks tending to create the impression that in Wisconsin, at least, the attempt to frame a law which would give every man, market or locality a commercial advantage over every other man, market or locality had not been entirely successful.

The situation seems tough, indeed, but how this stern refusal to grant a favor to one might affect the said dealer's competitors in business did not concern the correspondent; at least he did not discuss it.

STATE WEIGHING IN MISSOURI.

The status of state weighing of grain in Missouri is in no wise different than reported a month ago. The state's employees are weighing grain at Kansas City and the Board of Trade is supervising, both taking fees of the grain for their service, but the private elevators refuse to pay until the courts shall require them to do so. A suit to obtain a construction of the law will come before the Supreme Court at the current term; and until a decision is had in such suit, it is not likely any more will be done by the Railroad and Warehouse Commission to put state weighers in the terminal houses of other markets.

The movement of the Commission to take control of the weighing is generally regarded as rather offensive political activity, seeing that the law has been for several years on the statute book, and had been previously passed upon by the Attorney-General as not mandatory upon the Commission. That its enforcement now, in order to displace the public exchanges' weighers, is not based on any defects in the weighing service at the terminals of Missouri might readily be established by proofs of excellent service at all of them; but as an illustration of the satisfactory weights received by shippers of grain to the St. Louis market, we might cite the fact that Daniel P. Byrne & Co., a prominent grain firm of that city, report that a car of wheat consigned to them from Oklahoma weighed out 65,920 pounds as against the shipper's reported weight of 66,000 pounds. A car of wheat consigned from a Nebraska point weighed out 65,960 pounds, compared with shipper's weight of 66,000 pounds; and a car of corn from one of their Nebraska shippers weighed out 51,150 pounds, whereas the shippers reported their weights at 51,170 pounds.

These shipments coming from different sections of the country, and weighed at different unloading points in St. Louis or East St. Louis, would indicate general fair dealing in the St. Louis market as regards weights. Daniel P. Byrne & Co. tell us that good weights in St. Louis are far from being a novel experience with them, since they could cite numerous instances dating back for years in which the unloading weigh in their market were amazingly close to those advised by the shippers of the grain. Complaints from their patrons of shortages have been an exception, and were generally due to bad order cars or clerical errors. The latter were subject to correction, whether occurring at shipping point or St. Louis; and if leaky condition of cars was fault of the railroad company claims for shortages properly filed received favorable consideration by the claim department of the road. But if the shipper, himself, caused a leak of grain by overloading a car, his claim against the railroad company would meet with cold reception.

Similar good reports of the weights at St. Louis might be indefinitely multiplied, but that market can not take all such credit to herself; for other markets of the state note improved conditions in this regard; and no doubt persistent agitation of the subject by the different trade press and the grain dealers' associations has contributed to this happy result.

WHAT THE MISSOURI RAILROAD AND WAREHOUSE COMMISSIONERS SAY.

So far as the public is concerned, the matter of who shall control the weighing of grain in Missouri terminal elevators, until the courts pass upon the state law authorizing, or directing, the Railroad and Warehouse Commissioners to take charge of that service, has simmered down to an argument by officials of the Board of Trade and the Commissioners upon the equity and legality of the 100-pound dockage taken by the elevators at Kansas City, Mo. The officers of the Board naturally defend the practice, it being permitted by the Board's rules. The Commissioners, on the other hand, are defending their procrastination of five years in exercising the function of supervisors of weights by attacking the dockage. And the Com-

missioners rather have the best of the argument. In reply to President Goffe's defense of the dockage, the Commissioners in a signed statement say:

President Goffe says that "the weighing of grain by the state will not do away with the dockage of 100 pounds on each car weighed; that it will be taken just the same under state weighing as at present; that the Commissioners cannot prevent it."

The Commissioners can and will prevent the members of the Kansas City Board of Trade from defacing state certificates by red-inking 100 pounds off each car of grain, as is now done with the Board of Trade certificates, with the signature of the chief weighmaster of the Board of Trade attached. This is the character of the weight certificates now being sent out to the farmers and grain men of Kansas and Missouri. President Goffe is evidently not posted as to the character of the certificate sent out.

President Goffe, however, states that "this dockage is specially provided for in the contract between the buyer and seller." Will President Goffe inform the public who exacts this contract? Has the seller any voice in the matter? If his grain is shipped to the Kansas City market, the members of the Board of Trade, with one accord, tell him that he must give them 100 pounds out of each car, otherwise they will not buy it. Is this not the situation? But the law can compel these gentlemen to pay for what they get; the law can and will compel them to pay for what the sworn weighers of the state find in a car of grain. The Commissioners cannot prevent the farmers and grain men from signing a contract to give to the members of the Kansas City Board of Trade so many pounds out of each car, but they can place them in a position where they will not be compelled to submit to that outrageous, wholly uncalled-for and unreasonable tax. Let the people who patronize the Kansas City market demand pay for what they deliver, refuse to sign "100-pounds-off contracts," and demand state certificates of weight, and the problem will be solved.

A Kansas City elevator man is also quoted as follows in a recent interview:

"I can unload 100 cars of wheat into my elevator and load it out again, deducting 100 pounds from each car, otherwise loading the identical amount of wheat that was unloaded, and I will find that there will not be enough wheat to fill the last car. In other words, 100 pounds to the car does not amount to as much as is lost in dust and dirt that blows out in the process of unloading and reloading the grain. Every elevator in Kansas City is 'short' at the end of the season, notwithstanding the 100 pounds per car that are taken. If my records show that I have taken in a million bushels of wheat and have loaded out 990,000 bushels, my elevator should contain 10,000 bushels, but as a matter of fact I am likely to have several thousand bushels less than that amount, because I will have weighed into the elevator thousands of pounds of dust and dirt along with the wheat, and this will have blown away in the process of loading and unloading, running the wheat up to the hoppers and down again into the bins. If the elevator men did not take 100 pounds from the weight of each car they would be forced to buy wheat at one-quarter to one-half a cent less per bushel than they now pay."

The uninitiated might be fooled by a statement of this kind. It looks fair enough on its face. But it must be remembered that each car of grain is inspected before it goes into the elevator. The chaff and dirt in it affect the grade; in other words allowance is made for the chaff and dirt in arriving at the grade. [Having quoted the rules the Commissioners say:] It will be observed if the wheat is full of dirt and dust the elevator pays for that kind of wheat. There is a difference of three pounds in a bushel between No. 2 and No. 3 wheat.

But that is not all. The great bulk of No. 3 wheat that goes into an elevator comes out as No. 2. Probably half of No. 4 wheat comes out as No. 2, and not a little of rejected. If the farmer's wheat weighs sixty-one or sixty-two pounds to the bushel he does not get a better grade than No. 2, although the required weight is only fifty-nine pounds to the bushel. The elevator men, however, make good use of the heavy wheat. They take in Nos. 3, 4 and rejected, clean them and by mixing a little of the sixty-one and sixty-two pound wheat with it convert the great bulk of these grades into No. 2 wheat. They never deliver sixty-one and sixty-two pound wheat, but see to it that wheat coming out of the elevator does not go over fifty-nine pounds as No. 2. If No. 3 is converted into No. 2 the reader can readily see the profit the elevator is making, 4 to 6 cents a bushel. It is probably true that there will be a shortage in weight at the end of the season with the elevators, but this is made up many fold by the process of improving grades. The farmers and grain men sell their wheat on

grade. If it grades No. 2 they should get No. 2 price and full weight, and so on through the grades, allowance being made in the price for dirt. So it will be seen that the contention of the elevator man will not hold good.

WHAT THE KANSAS STATE WEIGHMASTER SAYS.

After discussion of the dockage at Wichita, Kan., on September 28, the Kansas Grain Dealers' Association adopted a resolution condemning the practice, which is legal only because shippers are forced to agree to the dockage by contract with the receivers, and instructed the Association counsel to proceed under Kansas law against anyone shrinking the weight in the manner allowed under the rule; and certain members of the Kansas City Board of Trade, more interested in the market itself than in the perquisites of the elevators, have petitioned the Board to abolish the offensive rule—a proposition that when previously voted upon was defeated by nearly two to one.

Having in the last issue of this paper presented the Board's side of the case, it is but fair to give the other side a hearing; and in addition to the communication from the Missouri Commission printed on another page, the following extract is made from a circular letter to grain dealers in Kansas by J. W. Radford, the chief grain inspector and weighmaster of Kansas City, Mo., and printed in certain Kansas City papers. After referring to the Wichita meeting, and the Kansas City Board's order to reduce its weighing charge to 35 cents per car, on grain coming "in," Mr. Radford continues:

They do not say what they intend to charge on "out" weights. I am prepared to furnish proof that they [the Board of Trade bureau] not only have been failing to charge as much for "out" weights as they do for "in" weights, but for some members at least they have not charged any fee whatever on some stuff; or, in other words, you have been paying the freight.

Mr. Brodnax, as chairman of the weight bureau, says that the Board of Trade maintains a bureau in order to get correct weights; to give out honest dealings. Ask Mr. Brodnax, if his statement be true, to please explain, first: Why does he charge 50 cents to \$1.50 per car for weighing all stuff coming into Kansas City and only 10 cents per car for weighing each car "out" of elevators or warehouses? This 50 cents "in" and 10 cents "out" make 60 cents per car for handling it twice. Now on what theory does he justify these claims of discrimination? If it is only worth 30 cents each way on these cars to do this work, by what right do they charge the country shipper 20 cents more than it is worth for the service, and by whose authority do they take this 20 cents and apply it to the credit of the man who ships it out? Is it not proper to assume that Mr. Brodnax, or anyone else of his way of thinking, in control of affairs, if he thinks it no violation of law to deduct 100 pounds per car in Kansas, thinks it proper to charge the country shipper 50 cents for identically the same services as is charged 10 cents on "out" stuff?

Now there has been such a persistent effort on the part of Mr. Brodnax, who misled and misguided the people in this matter, that I submit a few queries for Mr. Brodnax to answer. If the Board of Trade was an efficient department and able to cope with the situation, why, in all its years of existence, did it not see fit to place more than one man at an elevator? Why did it wait until I reorganized the weighing bureau for the state [of Kansas] and placed two men at each large elevator before it decided to ape my method of looking after the weights? Why is it that at all large elevators to-day on the Kansas side of Kansas City, with the exception of one, they now have two weighmasters? Why, if they are looking after the interest of the trade, do they not take the same precaution on the Missouri side at all elevators similarly situated? Why do they not maintain a downstairs, or floor, man at the Memphis elevator, which is operated by Mr. Brodnax, the chairman of the weight bureau committee? Do they brand the Maple Leaf, Union Pacific, Terminal, Frisco, Argentine and Turner elevator managers as more dishonest than Mr. Brodnax of the Memphis, or all elevators in Missouri excepting two, those two being the Milwaukee and the Kansas-Missouri elevator? Or is it a fact that they are simply playing horse over in Kansas and make a show of strength simply because I maintain two weighers at these points? Certainly, if it is necessary to keep two weighers at big elevators on this side of the line, it naturally follows that it would be just as necessary to have them in Missouri. Why not?

If they are looking to the interest of their patrons properly, why don't they further ape the methods used by the Kansas department and put on yard inspectors, as I have, looking to the condition of cars on arrival? I would like to ask if this is what Mr. Brodnax terms an efficient department, installed from necessity? I would like to ask if he thinks there is no room for improvement? And in reference to the men I maintain in all railroad yards to inspect the condition of cars upon arrival and keep proper record of the same, I want to assure you that this has worked wonders. It has increased largely the caution taken by the common carriers; it has enabled them to place the blame where it belongs in most cases, thereby facilitating the adjustment of claims when properly followed up.

The railroad companies now keep regular crews to repair grain cars upon arrival. This benefit is reaped by the buyer and seller of grain, and the railroad companies take the position that they want to protect interests whenever possible, and they find no objection to my method, for they have been convinced that my motives are only to better the conditions surrounding the business. If the railroad company is really to blame in the case of shortage, the sooner it is convinced of this the sooner it will settle.

The Board of Trade checked up the Rock Island and Santa Fe yards last Monday for leaks, and this is the first effort of this kind for months. I want you to understand that not all the members of the Board of Trade, nor nearly all of them, are of the opinion that it is the best thing for them to maintain a weight bureau of their own, under their own supervision, subject to their orders and controlled by a committee of vitally interested parties. There are quite a number of them who are of the opinion that a disinterested bureau, situated as the state is, would be better than the Board of Trade, and at least they feel that there should be no objection in having the state supervise this work. They talk about the fee of 50 cents driving away business. I want to assure you that where a car of grain is at stake, aggregating in value from \$600 to \$1,000 or \$1,500, the fee is an insignificant sum, taking into consideration services of the character we render. We are worth more than 50 cents per car to the Kansas shipper if we do nothing but inspect the condition of the cars and look after the seal record, etc., as we do, to say nothing about the services rendered as to the examination and correcting of scales, seeing that the cars are properly swept and the contents credited to the proper cars, etc.

Since the reorganization of my forces, and since July 6, 1903, I have a detailed report on 21,780 cars that were in a leaky condition or with seals broken. I have the original report on file in my office in each of these cases. I have furnished duplicates and sent them each morning to the consignee on the Board of Trade. I have taken great pains to systematize and tabulate this information, and I feel the results attained well repay me for the effort made. For instance, I found the condition at a certain elevator in regard to sweeping under the so-called "efficient and perfect and only necessary Board of Trade weighing department" [such] that in [the] three months and six days during which time I was getting this data, 42,972 pounds were swept and sold. To say the Board of Trade did not know this was going on would certainly be an admission of incompetency at least.

DRIER AT PHILADELPHIA.

The export grain trade is reviving at Philadelphia in a way to please all there engaged in that trade. The demand for oats seem to be exceptionally good at current prices from the Continent as well as from Great Britain and Ireland.

Philadelphia exporters begin to realize, however, that the port must be equipped with a grain drier if they expect to continue to hold their business, now that Baltimore as well as New Orleans has drying facilities. And members of the Commercial Exchange are urging the Pennsylvania and Reading roads, which own the export elevators at Philadelphia, to provide driers and then complete the equipment of the port on a modern exporting basis.

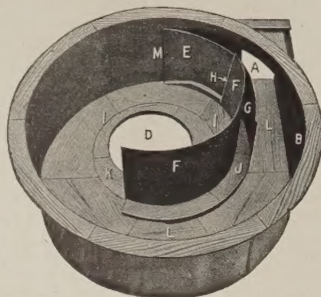
Peoria distillers announce a scarcity of corn as a reason for advancing the price of finished spirits 1 cent per gallon, September 26.

Philadelphia has been doing a big export business in oats this fall, having between January 1, 1905, and September 24 shipped 1,050,162 bushels against 400 bushels in the same period of 1904. This smashes all export records of the past on this cereal.

"THE NEW CYCLONE 1905."

The Knickerbocker Company of Jackson, Mich., makers of the well-known Cyclone Dust Collector, have made some radical improvements in their collector, which they are now marketing as "The New Cyclone 1905."

The annexed illustrations show the changes which have been made for the purpose of reducing back pressure on the suction fan. The advantage of having the suction fan exhaust into a dust collector that requires practically no power to secure circulation through the machine does not

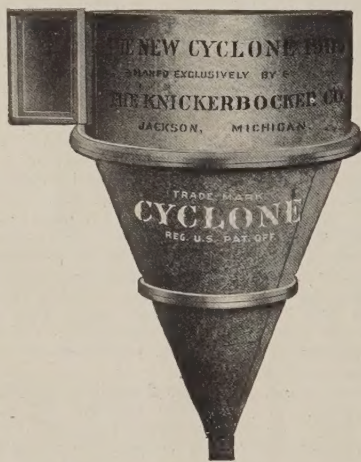


INTERIOR VIEW OF UPPER SECTION.

call for argument. The benefit accruing from a full and free use of the fan on any work in which the action of the fan is necessary can be fully appreciated. The necessity of maintaining a uniform suction of any established degree is understood.

Of the power of the fan blowing into the old Cyclone Dust Collector, 50 per cent has been, and is, consumed in overcoming the back pressure—50 per cent of the power necessary to drive the fan is absolutely wasted and thrown away. "The New Cyclone 1905" for all general requirements only produces 4 or 5 per cent back pressure.

The sectional cut shows the interior view of the upper section of "The New Cyclone 1905" and



"THE NEW CYCLONE, 1905."

the deflector construction for controlling the air. In the old Cyclone, with tubular guard, the entering air encounters the direct force of the whirling body formed in the collector and confined in a spout chamber between the casing and the tubular guard. The whirling air body, being stronger than the incoming air, chokes it off and crowds it back upon the fan, resulting in heavy back pressure, as the incoming air has to be forced in between the whirl and the casing wall.

In "The New Cyclone 1905" the air entering chamber L at the inlet A encounters the air directing casing B, which causes the air to travel in a curved path, and it is directed thereby into the whirl area or chamber I, wherein is set up a vortical whirl eccentric to the axis of the casing. It will be apparent that in this rotating and whirling movement, the dust carried by the air, by reason of its greater persistence of motion than the air, is centrifugally thrown outward and masses against the casing B, where it is held and then caused to move forward and downward. At M the air traveling next to the

casing B passes under the action of the first deflector E, which prevents the air current from going against or choking the incoming air from the fan. At H the dust remaining in the air traveling next to the casing B passes back of the deflector F into chamber G, which, being several times larger at its discharge end, J, than at its opening H, acts as an expansion chamber for the air and permits it to again pass under the action of the air in chamber L, but with greatly reduced momentum and traveling in the same direction.

The inner deflector, F, acts on the practically dustless portion of the air inside the dust-laden belt and causes its deflection into chamber I, where is created a vortical whirl eccentric to the axis of the casing in the area of the air outlet opening, D, from which the air freely escapes directly into atmosphere. The deflector, F, holds the dust-laden air in chamber G from again mingling with the practically dustless air in the eccentric vortical whirl or coming under the action of the air escaping freely out of the unobstructed air outlet. The action of chamber G is an important feature. While it divides chambers L and I, it communicates with both and takes the dust-laden air from one and deposits it into or below the other. The dust and air, passing below the plane of the deflector construction into the area of the cone, come under the action of the vortical whirl whose center is the axis of the cone. In the operation of "The New Cyclone 1905" the benefit of the combination of the siphonic action in chamber L, the eccentric vortical whirl in chamber I and the concentric vortical whirl in the cone is secured.

It is a manifest fact that back pressure cannot exist where the space into which the fan is exhausting steadily increase in area from the air inlet to atmosphere. "The New Cyclone 1905" is such an expansion chamber. The hood used on the old Cyclone caused a back pressure of 5 per cent, and for that reason its use has been discontinued, but when so ordered, the manufacturers furnish in its place an elbow which answers the same purpose and does not produce back pressure. All collectors are built right-handed; that is, with the air current running with the sun, unless otherwise expressly ordered.

THE NEBRASKA "TRUST" CASE.

Owing to "bad weather," or other causes, none of the witnesses subpoenaed appeared at Lincoln on September 18 to testify in the action of the attorney-general of Nebraska against various members of the Nebraska Grain Dealers' Association.

However, the parties named in the action brought by Mr. Worrall filed demurrers identical in all cases, save that of the Nye-Schneider-Fowler Company, who filed a separate one. The points raised by the demurrer are as follows:

The court has no jurisdiction of the person of the defendant, or the subject of the action. The plaintiff has no legal capacity to sue.

There is a defect of parties defendant.

Several causes of action are improperly joined.

The petition does not state facts sufficient to constitute a cause of action.

In the Nye-Schneider-Fowler case it is pleaded that the injunction was asked for under the Junkin law, and that information of the alleged transactions of the grain men before that law was enacted is not germane; that is to say, that the petition of the state is framed as a suit in equity under the Junkin act, which took effect July 1, 1905, and no other law previously enacted or now in force will support such an action in equity; that the Junkin act, if it is now enforced at all, and is applicable to this case, repealed by implication all prior statutes on this subject, hence all acts occurring prior to July 1, 1905, are immaterial and should not be permitted to be pleaded; the defendant therefore moved to strike from the petition the words "for the last three years," and if the plaintiff desires to substitute

any other time therefor to limit such time to a date not prior to July 1, 1905. In the alternative, if the foregoing be overruled then to vacate the restraining order.

The court then set the hearing on the demurrers for November 7 and gave the defendants twenty days in which to file briefs. The state will then have twenty days and the defendants seven days to file reply briefs. The final decision of the court is not likely to be given for two months or more. In the meantime the temporary injunction secured by Attorney-General Brown will remain in force.

SHRINKAGE HEARING RESUMED.

The Commerce Commission at Washington on September 20 resumed consideration of the shrinkage system of rate making on grain at Louisville, adjourned from July. Representatives of the grain trade were present from Louisville, St. Louis, Henderson and Cairo.

Grain rates to the Southeast, as they existed under the system complained of, have enabled Louisville dealers to buy grain for Southeastern consumption in St. Louis territory in competition with St. Louis grain merchants, on terms more favorable than the latter can secure. Because of the "shrinkage" at Louisville—an allowance of 3 cents by the railroads on every hundredweight of grain going through the gateway—Louisville has had an advantage which compelled a vast bulk of grain, amounting to about 10,000,000 bushels a year, to go through Louisville. Otherwise, it is claimed, a large percentage of this grain would be distributed through St. Louis, the natural gateway.

Messrs. Compton and Powell, representing respectively the L. & N. and Southern systems of railways, maintained before the Commission that the existing system, with the "shrinkage" allowance, is a necessity to the participation of their roads in the grain business to the Southeast.

The St. Louis witness, or spokesman, was W. B. Harrison, who said:

It may not have escaped your observation that St. Louis has not been spoken of very frequently in this adjustment, and I want to direct your particular attention to the conditions which prevail at St. Louis and to emphasize the peculiar situation which she occupies.

As the center for twenty-four large railway systems, tapping the grain belt of the section west of the Mississippi River, and also the grain-raising section in Illinois, with elevator capacity, public and private, for nearly 11,000,000 bushels of grain, and geographically so located as to be a natural reservoir for the accumulation of grain and a distributing point for the Southeastern markets, she finds herself deprived of her rightful share in this distribution.

As Mr. Powell very truly said, "the present system of rates is an evolution." During the process of evolution, however, in which the movement of grain has sought the line of the least resistance, artificial conditions have been created, which have operated to deprive St. Louis of her natural advantages as an accumulative and distributive center.

Prior to the extension of any important railroad systems into Memphis, the grain from all the territories west of the Mississippi River drifted naturally to the St. Louis market. With the advent of the Memphis lines, however, came a change in conditions. Such business as had hitherto moved to St. Louis began to seek the shorter route to the Southern seaboard and to the Southeast, and the St. Louis source of supply became restrictive to that part of the country west of the Mississippi River lying north of Kansas City and east of the Missouri River, which was not naturally tributary to the Kansas City-Memphis route. This territory embraced a large part of Iowa, Missouri and Northern Nebraska, and might be considered tributary to St. Louis and would under natural conditions seek that gateway to the South. This is a geographical advantage which St. Louis could and ought to enjoy.

Because of the arbitrary action of the Louisville lines, which have, in spite of all opposition, insisted on establishing and maintaining this system of shrinkage or equalizing through rates from all this territory to the Southeast via Louisville, St. Louis has been deprived of this natural advantage, and the grain originating in the section described, instead of seeking a natural outlet via St. Louis, Cairo or Evansville, is forced some 180

miles out of its direct route in order that the Louisville lines can handle it.

In Illinois the grain is distributed through five other gateways with which St. Louis is forced to compete. Some of this Illinois grain is tributary to Louisville, and some of it to Cairo. There is not a point in Illinois from which grain can be drawn to East St. Louis which is not equally within reach of Cairo or Evansville. Consequently, while St. Louis is at a disadvantage of 1 cent per pound on such Western business as can be handled by the Kansas City-Memphis route, she has no corresponding advantage either in the grain belt naturally tributary to her on the west or on the section on the east of her and Illinois.

Under the circumstances we are here not only to protest against a further continuance of these shrinkages at Louisville, but also to request an adjustment of the rate conditions under which the grain west of the Mississippi tributary to St. Louis shall move through its natural channels via St. Louis, Cairo or Evansville, or if forced to Louisville pay a correspondingly higher rate for the increased distance."

Mr. Harrison also said, in substance, that there have been two sets of shrinkages in effect at Louisville; one of 3 cents per 100 pounds on Western grain, and another of 2 cents per 100 pounds on Illinois grain. It had been shown that there is a large local consumption of grain at Louisville, which has left a good surplus of 3-cent-shrinkage billing to be used by the Louisville dealers and which has been used in reducing the rate to that extent on grain originating in Indiana and Illinois; that by substituting billing Louisville has been able to undersell St. Louis shippers in

The defense of the system and the Louisville dealers was made by Judge Alex. P. Humphrey, who, among other things, said: "Louisville shippers are not complaining. If any persons have a right to complain they have, but they are satisfied; the only complaints are from the shippers in rival markets, who proclaim that our rivalry is something which they cannot submit to."

The grain business with the South, Judge Humphrey continued, originated in Louisville. Louisville, out of a spirit of generosity, had allowed other points the use of its gateway of commerce. "And lo and behold," said Judge Humphrey at this point, "we now find ourselves in the position of the Arab who allowed the camel to poke its nose into his tent. We ask no advantages over our rivals, and we are receiving none. The St. Louis merchant gets a rate of 23 cents per 100 on grain shipped from Illinois through Cairo, Evansville and Louisville to Atlanta, while we have to pay 24 cents on grain shipped from Illinois to Atlanta." Judge Humphrey said that the manipulation of expense bills has been "entirely remedied."

The cause has been taken under advisement by the Commission.

A NEW APRON CONVEYOR.

The accompanying illustration shows an apron conveyor that was recently installed by the Lake



APRON CONVEYOR FOR HANDLING BAGS OF RICE OR GRAIN.

the markets of the Southeast and the Carolinas; that as far as Illinois grain is concerned, Louisville has been on an equal basis with all other points in competing for grain on the lines of the largest grain carrying roads, without any shrinkage allowance whatever.

The shrinkage of 3 cents on Western grain, Mr. Harrison contended, is simply a plan adopted by the Louisville lines in order to force grain from that territory 200 miles out of its natural channels via Louisville to Southeastern markets.

The Commission was told that all shrinkages at Louisville should be abolished and flat rates established from all Ohio River crossings, so that all might have the same rate to the same territory; and that the adjustment, so far as St. Louis is concerned, should be 1 cent per 100 pounds higher than the Ohio River basis.

The St. Louis dealers also protested against the continuance of the present adjustment by which the Louisville lines are able to equalize, via Louisville to Southeastern points, rates on grain originating in territory tributary to St. Louis west of the Mississippi River.

The arguments of the St. Louisans was reinforced by a statement prepared by Secy. A. F. Versen of the St. Louis Traffic Bureau, giving a comparative schedule of rates from 827 stations in the Illinois grain belt, which showed that Louisville is on a perfectly fair basis on tariff rates, as they have existed, without making any shrinkage allowance at Louisville.

Arthur Rice Milling Co. of Lake Arthur, La., for carrying bags of rice between steamboat and warehouse. This conveyor is of special interest to grain dealers and shippers, as the different classes of freight and material which they will handle are unlimited. With reversible drive connections the carrier runs in either direction, and having the dock end adjustable, can be raised or lowered to suit the different stages of water.

In construction the conveyor consists of two strands of steel link chain, to which are attached wooden flights, these in turn being supported every 36 inches by flanged rollers. These rollers run on flat iron trackage, so that the entire load is carried on roller friction and the power required to operate reduced to a minimum.

The Jeffrey Manufacturing Co. of Columbus, Ohio, who designed and manufactured this conveyor, have furnished similar equipments for handling grain, bales of cotton, barrels and general merchandise under various conditions, and interested parties may secure further information by applying direct to this firm.

The largest cargo of grain ever shipped out of Chicago was cleared on September 29 from the Calumet Elevator on the steamer Geo. H. Russell. It was composed of 235,000 bushels of corn and 50,000 bushels of barley, aggregating 7,902 tons. The largest previous cargo was that of the steamer Rensselaer, which took out 300,155 bushels of wheat, barley and oats weighing 7,668 tons.

[For the "American Elevator and Grain Trade."]

THE OLD GRAIN MAN'S SOLILO- QUY.

BY E. B.

It's very plain to me, sez he,
That the business ways to-day
Are different from what they wuz
Afore I got so gray.

When I'd meet ol' Joe upon the street
(He'd his office 'cross the way),
We'd neither of us dast to speak
Or pass the time o' day.

But now ol' Joe and I just stop
Whene'er we chanst to meet,
'N have learned 't we can get along
All right on the same street.

An' as for lawin', I'm plumb sure
'T I've paid nuff lawyer's fees;
Yet I don't know now what all it did,
'Cept makin' enemies.

For now I'm told there's a different way
When two gets disputatin',
To settle it all out o' court,
An' they call it arbitratin'.

I tried it once, 'n say, "you bet,"
'Twas the first time on this earth
'T I paid my money slick and clean
An' got my money's worth.

And now I'm livin' peaceable,
An' I'd be rich if I'd a-sensed
To run my business this here way
Since the day that I commenced.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

R. R. SMITH SELLS OUT.

Editor American Elevator and Grain Trade:—
I have sold my elevator and implement business to Thomas A. Smith of Winnebago, Ill., who comes to his new field with a good record.

Yours truly, R. R. SMITH.
Traer, Iowa.

VALUE IT HIGHLY.

Editor American Elevator and Grain Trade:—
We have long been subscribers for your paper and value it highly. Enclosed find our check to renew our subscription for another year.

Yours truly, P. B. SMITH, Gen. Mgr.
The St. Anthony & Dak. Eltr. Co.
Minneapolis.

BUILDING AT CLEVELAND.

Editor American Elevator and Grain Trade:—
We are building an elevator in connection with our hay warehouses. We will have 20,000 bushels' capacity and the latest improved cleaning and elevating machinery. The latter is being installed by the Bartlett & Snow Co. of Cleveland. We are also having additional storage capacity for hay, making our total capacity 100 cars.

Yours truly, ABEL BROS.
Cleveland, Ohio.

STATE WEIGHING IN KANSAS CITY.

Editor American Elevator and Grain Trade:—
The trade here generally considers the action of the Missouri Railroad and Warehouse Commission in assuming at this time the authority to weigh grain in private warehouses and mills as a graft for political purposes. There is no necessity for state weights at Kansas City. The Board of Trade supervises the weights here. Under their system we are having excellent results and giving general satisfaction. We believe that no market affords better weights than Kansas City does at the present time. Hence, it is that the trade is

loath to see any change, especially where they are governed by politicians.

Yours respectfully,

GEO. A. ADAMS GRAIN CO.

Kansas City, Mo.

H. L. STRONG GRAIN CO.'S HOUSES.

Editor American Elevator and Grain Trade:—
We notice the write-up of our Coffeyville and Conway Springs elevators in the last issue of your journal, which is very good. We want to inform you, however, that we have lately sold our Coffeyville house, which leaves us only one Conway Springs house as a terminal cleaning and transfer house. We sold the Coffeyville house to Walton Grain Co., who are now operating it. We have a working contract with the purchasers, however, to handle stuff through the Coffeyville house for our account.

Yours truly,

THE H. L. STRONG GRAIN CO.

Kansas City, Mo.

MISSOURI RAILROAD AND WAREHOUSE COMMISSIONERS' SIDE OF THE KAN- SAS CITY CONTROVERSY.

Editor American Elevator and Grain Trade:—
We are certain that you do not want to be unjust to this department, yet there are a number of articles in your issue of the 15th of September that are very misleading. We quote from your editorial page:

One can but sympathize with the trade in Missouri markets, where the Railroad Commission has set out to enforce a law providing for the weighing of grain at terminal elevators, under the supervision of the Commission and by its employees, necessitating an extra charge of 50 cents per car to be taxed to the grain.

But while the Kansas City Board of Trade has the sympathy of the trade in its fight against the state crowd, it would greatly strengthen its cause by an immediate abolition of the tare of 100 pounds per car of grain given gratis by the rules to the elevators. A "sweepage" toll that is reasonable in amount is fair enough; but the amount taken at Kansas City is about the highest limit taken anywhere; and it is, moreover, contrary to the laws of both Missouri and Kansas. The Board ought, therefore, to try and go into court with its case unprejudiced by a practice condemned by the laws of the states from which the bulk of its receipts come.

Why is the trade entitled to sympathy on the score of the state assuming the weighing of all grain at terminal points in Missouri? Is it a hardship on anyone to have the grain received in the markets of this state weighed by bonded, sworn state weighers? Why will it necessitate an extra charge on the grain of 50 cents on each carload? This is evidently on the supposition that the superfluous Board of Trade weighers will be retained at the shippers' expense. Why are not the buyers of grain in the markets of this state willing to take the weights of bonded state weighers? Why should they, in the absence of the seller, insist on having the weighing done by men entirely and wholly under their control? To whom are the Board of Trade weighers responsible? Not to the shipper, all will agree. They are paid by the Board of Trade out of funds contributed by the seller. The seller has no voice in their selection. It is a jug-handle affair. The Board of Trade weighers are not sworn to give correct weights—not bonded, and, therefore, are responsible to no one. On the other hand, the state weighers are both sworn and bonded and are responsible to the public for their work. If they act dishonestly, their bondsmen are responsible for them. That the weighers selected by the state must be men of character is attested by the fact that each must file an approved bond in the sum of \$5,000. An irresponsible person cannot give bond.

If the Board of Trade is not satisfied with state weights, let the members of that body employ, at their own expense, check weighers. To this no one will object; but this tax, wholly unnecessary, should not be charged up to the shipper. There must be only one charge for weighing and that made by the state. The law does not authorize any other charge.

An honest grain buyer who wants correct weights by an unprejudiced third person, therefore, is not entitled to sympathy on the score of state weights; it is the fellow that does not want to pay for all he gets who is in need of sympathy; and we do not believe that you have any sympathy to waste on that class of grain buyers.

You are mistaken in the matter of toll at Kansas City. The 110-lb. dockage is not for grain left in the car. The dockage is taken from the net weight of the grain after it is weighed in hopper scales. The farmer loses the sweepage in the car in addition to this 100 pounds exacted by the Board of Trade of that city. What do you think of that? Don't you think that your sympathy should be transferred to the farmer who is thus robbed?

This Commission made an order more than two years ago against taking of this toll. The Merchants' Exchange of St. Louis respected it, but the Board of Trade of Kansas City got around it by compelling shippers to that market to sign a contract, agreeing that 100 pounds should be taken off each car. It is nothing more nor less than taking up a collection from the farmers, who contribute annually to the members of the Board of Trade of Kansas City \$50,000 to \$60,000 in this way.

You quote President Goffe, president of the Kansas City Board of Trade, as saying that the farmers of Kansas are protesting against state supervision of weights. Ask Mr. Goffe to send you a letter he recently received from W. D. Madden of Hays City, Kan., one of the largest grain dealers in that state, for publication in your excellent paper for the information of the public. Mr. Madden says that he has been skipping Kansas City recently on account of unsatisfactory weights and the 100 pounds dockage.

Mr. Goffe is also unkind enough to charge that state weighing is being inaugurated to take care of a lot of political henchmen. Mr. Goffe knows this to be untrue, if he has investigated the matter at all. If he will go over the roster of state weighers he will ascertain that the force is largely made up from the pick of the Board of Trade weighers who resigned their positions to accept state employment. The state has for years and years maintained an inspection department at Kansas City. Will Mr. Goffe be kind enough to tell the people whether men in that department are employed on merit or political pull? The Board of Trade is not conducting an inspection department. Why not? Why are the members of the Board of Trade willing to take state inspection and reject state weights?

State weights and state inspection will, in our opinion, give strength to any market. We believe that the Kansas City Board of Trade is unnecessarily injuring the Kansas City market by refusing to agree to weights by disinterested, sworn and bonded state weighers. We have no feeling in the matter, our only ambition being to protect both the seller and the buyer.

Very respectfully,

JOE P. RICE,
JOHN A. KNOTT,
F. A. WIGHTMAN,

Railroad and Warehouse Commissioners for Missouri.

St. Louis, Mo.

GRAIN DEALERS' NATIONAL ASSOCIATION.

Editor American Elevator and Grain Trade:—
The Grain Dealers' National Association makes the following announcement of the roster of officers and members in good standing to October 4:

Officers—M. F. Dunlap, President, O'Fallon, Mo.; Charles England, first vice-president, Baltimore, Md.; Fred Mayer, second vice-president, Toledo, Ohio; H. L. Goemann, director-at-large, Toledo, Ohio; John F. Courcier, secretary-treasurer, 220-221 Gardner Building, Toledo, Ohio.

Executive Committee—H. L. Goemann, chairman, Toledo; M. F. Dunlap, O'Fallon, Mo.; A. E. Reynolds, Crawfordsville, Ind.; J. W. McCord, Columbus, Ohio.

Directors—H. L. Goemann, director-at-large, Toledo; A. E. Reynolds, Crawfordsville, Ind.; T. J.

Stefer, Buffalo; J. W. McCord, Columbus; D. Hunter, Hamburg, Iowa.

Standing Committees—Arbitration: Warren T. McCray, chairman, Kentland, Ind.; Adolph Gerstenberg, Chicago; C. B. Jenkins, Marion, Ohio.

Trade Rules: Arthur R. Sawers, chairman, Chicago; C. D. Jones, Memphis; E. L. Rogers, Philadelphia; A. F. Leonhardt, New Orleans; J. S. McClellan, St. Louis.

Legislation. H. E. Halliday, chairman, Cairo Ill.; W. N. Eckhardt, Chicago; W. S. Gilbreath, Indianapolis; D. N. Dunlap, Fontanelle, Iowa; F. P. Lint, Kansas City, Mo.

Special Committee on F. O. Paddock's Niagara Falls Address: Charles England, chairman, Baltimore; F. O. Paddock, Toledo; H. L. Early, Cincinnati.

DIRECT MEMBERS.

Albany, N. Y.—Duran & Elmore.
Atchison, Kan.—S. R. Washer Grain Co.
Atlanta, Ga.—Geo. W. Brooke, Jos. Gregg & Son.
Atlanta, Iowa—L. T. Spangler.

Baltimore, Md.—Hammond & Snyder, Kirwan Bros. Co., Pitt Bros., Chas. England & Co., G. A. Hax & Co., Thos. S. Clarke Sons, Thos. Botts & Co., Louis Muller & Co., Wm. Hopps Hay & Grain Co., C. A. Gambrell Manufacturing Co., C. P. Blackburn & Co., Gill & Fisher, Lederer Bros., Fahey & Ryley, W. G. Bishop & Co., J. A. Manger & Co., E. Steen & Bro., Jos. O. Linton.

Battle Creek, Mich.—McLane, Swift Co.
Boston, Mass.—Thos. Ronald.
Buffalo, N. Y.—Pratt & Co., John A. Seymour Jr., Buffalo Cereal Co., Burns Bros., C. F. Rockwell, Whitney & Gibson, M. L. Crittenden, Dudley M. Irwin, O. G. Spann.

Cairo, Ill.—H. L. Halliday Milling Co., Redman Magee Co.

Carroll, Iowa—J. R. Whitney.
Chicago, Ill.—Armour Grain Co., Bartlett, Frazier & Carrington, Bridge & Leonard, Thos. Bennett & Co., Counselman & Stream, C. L. Dougherty & Co., E. W. Wagner, Hulburd, Warren & Chandler, W. A. Fraser & Co., Northern Grain Co., Ware & Leland, Rumsey & Co., Glucose Sugar Refining Co., J. Rosenbaum Grain Co., Mueller Young Grain Co., Nye-Jenks Grain Co., Illinois Seed Co., Warner & Wilbur, Lasier & Hooper, Van Ness Bros., Gerstenberg & Co., W. H. Merritt & Co., Peavey Grain Co., Buckley & Co., Pope & Eckhardt Co., John West & Co., W. W. & O. L. Hunter, United Grain Co., Somers, Jones & Co., W. J. Thompson & Co., E. Seckel & Co., Nash, Wright & Co., T. E. Wells & Co., W. P. Anderson & Co., Updike Commission Co., Pringle, Fitch & Rankin, Arthur R. Sawers.

Cincinnati, Ohio—Gale Bros. Co., Collins & Co., Van Luenen Co., Early & Daniels, Interstate Grain Co., H. J. Good & Co., Loudon & Co., Ellis & Fleming, Henry Heile & Sons, Union Grain & Hay Co.
Cleveland, Ohio—Cleveland Grain Co., The Union Elevator Co., H. M. Strauss Co.

Columbus, Ga.—Dan Joseph Co., Empire Mills Co.
Columbus, Ohio—McCord & Kelley, Tingley Bros., The Seeds Grain Co., J. P. McAlister Co.

Crawfordsville, Ind.—Crabbs-Reynolds-Taylor Co.
Dayton, Ohio—Schaeffer Broff Co.
Decatur, Ill.—Suffern, Hunt & Co.
Des Moines, Iowa—Des Moines Elevator Co.
Evansville, Ind.—W. H. Small & Co., Ohio Valley Seed Co., Edw. F. Goeke Co.

Frankfort, Ind.—Frankfort Grain Co.
Greenville, Ohio—E. A. Grubbs Grain Co.
Henderson, Ky.—Henderson Elevator Co.
Indianapolis, Ind.—W. S. Gilbreath Seed Co., Finch & McComb, Indianapolis Grain Co.

Jackson, Mich.—Stockbridge Elevator Co.
Kansas City, Mo.—Murphy Grain Co., E. D. Fisher Co., Logan Grain Co., Geo. A. Adams Grain Co., Goffe & Carkener, Hinds-Lint Grain Co., H. L. Strong Grain Co., Moses Bros. Co.

La Crosse, Wis.—W. W. Cargill Co.
La Fayette, Ind.—John Ross & Co.
Lancaster, Pa.—Jonas F. Eby & Co.
Lincoln, Neb.—Central Granaries Co.
Little Rock, Ark.—T. H. Bunch.

Logansport, Ind.—Geo. R. Hoopes.
Louisville, Ky.—Callahan & Sons, H. Verhoeff, A. C. Schuff & Co.

Memphis, Tenn.—Webb & Maury, Davis & Andrews, Williams-Fitzhugh Co., Shanks Phillips & Co., Wisner & Co., W. P. Brown & Co., Yates Donaldson, T. B. Jones & Co., J. B. Edgar Grain Co.

Milwaukee, Wis.—Runkel, Dakin & Sullivan, P. C. Kamm & Co., Deutsch & Sickert Co., I. H. Lowry & Co., F. Krause Co., Mohr-Holstein Co., Chas. A. Krause Co., Rialto Elevator Co., John Foley, Jr., Robert Krull Commission Co., J. V. Lauer & Co., L. Bartlett & Sons Co., E. P. Bacon & Co., Chas. R. Lull, Milwaukee Elevator Co., Franke Grain Co.

Minneapolis, Minn.—F. H. Peavey & Co., Way-Johnson-Lee Co., Van Dusen-Harrington Co., Great Western Elevator Co., P. B. Mann Co., Marfield Griffiths Co., St. Anthony Dakota Elevator Co., H. Poehler Co., Minnesota Grain Co., Anchor Grain Co., F. M. Davies Co.

Nashville, Tenn.—G. P. Rose & Co., Logan & Co.
New Orleans, La.—B. F. Glover's Sons Commis-

sion Co., A. F. Leonhardt & Co., H. T. Lawler & Co., Fred Muller, secretary Board of Trade.

New York, N. Y.—Larowe Milling Co., Jones & Morey.

Peoria, Ill.—Tyng Hall & Co., T. A. Grier & Co., P. B. & C. C. Miles, Van Tassel Grain Co., Frank Hall & Co., Buckley & Pursley Co.

Philadelphia, Pa.—M. F. Baringer, E. L. Rogers, S. C. Woolman & Co., Walton Bros., Chapin & Co., J. M. Buckley & Co.

Pittsburg, Pa.—D. G. Stewart & Giedel, R. S. McCague, C. A. Foster, R. D. Elwood & Co., H. G. Morgan.

Richmond, Va.—G. T. King, S. T. Beveridge.

St. Joseph, Mo.—C. A. Dayton Grain Co., T. P. Gordon.

St. Louis, Mo.—Calumet Grain Commission Co., Parrott-Day Co., R. M. Adams, Eaton McClellan & Co., Langenberg Bros. Co., Martin J. Mullally, Nanson Commission Co., Funsten Bros. & Co., Ballard Messmore & Co., John Wahl Commission Co., Seimers & Chisholm, Picker & Beardsley, J. L. Wright Commission Co., G. L. Graham & Co., D. P. Byrne & Co., Annan Burg & Co., John E. Hall Commission Co., John A. Warren & Co., C. H. Albers Commission Co., F. L. Wallace Co.

Selma, Ala.—Howard & Kornegay.

Slaters, Mo.—J. E. Bridges.

Terre Haute, Ind.—Bartlett, Kuhn & Co.

Toledo, Ohio—Isaac Harter Co., C. A. King & Co.,

Mississippi gateways dealers, we have undertaken to organize the southeastern territory, and by that means overcome many of the existing evils in that trade, the majority of which are the outcome of the lack of knowledge of conditions rather than of a disposition to practice uncommercial methods. The failure of all previously adopted plans has been due, in a large measure, we think, to the fact that both sides to the controversy have spent their time and energies passing resolutions for the government of the "Other fellow." What we want now is to get together, and the members of the National can materially assist us in our endeavors by so conducting their transactions in the southeastern territory as to stand above reproach.

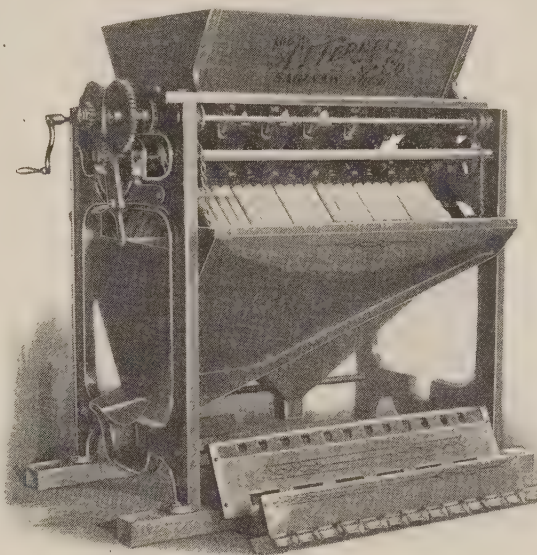
JOHN F. COURCIER,

Toledo, Ohio.

Secretary-Treasurer.

THE GIANT BEAN PICKER.

This well-known machine, which is shown in the accompanying cut and was formerly manufactured and sold by E. Knapp & Co., Middleport, N. Y., is now manufactured and sold only by A. T. Ferrell & Co., at Saginaw, Mich., the well-known makers of the Clipper Grain, Bean and Seed Cleaners and the Clipper Bean Picking Tables.



THE GIANT BEAN PICKER.

W. A. Rundell & Co., J. F. Zahm & Co., Reynolds Bros., United Grain Co., Southworth & Co., J. J. Coon, Raymond P. Lipe, Goemann Grain Co., Northwestern Elevator & Mill Co., National Milling Co., Travis-Emmick Co., S. W. Flower & Co.

Tyrone, Pa.—John Miller's Sons.
Vincennes, Ind.—R. J. Greenhow.
Washington, D. C.—W. M. Galt & Co.

Associate Members.—Fairbanks, Morse & Co., Chicago; Weller Manufacturing Co., Chicago; Grain Man's Guide, Decatur; H. & L. Chase Bag Co., St. Louis; John B. Daish, Washington; Royal Bag & Yarn Manufacturing Co., Charleston, S. C.

Affiliated Associations.—Indiana Grain Dealers' Association, Ohio Grain Dealers' Association, Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri, Buffalo Grain Dealers' Association.

Address all communications, relative to Association matters, to the secretary at Toledo, Ohio. This will enable the secretary to forward to the various chairmen of committees whatever data may be on file in his office bearing on the subjects submitted.

Submit your trade differences to the arbitration committee of the Grain Dealers' National Association. It costs nothing if you are in the right, and only \$10 if you are wrong. Prepare your papers in duplicate, and send them to the secretary at once.

A large and active membership is necessary to a useful existence of any association. Send the names of all eligible non-members to the secretary. Special mention will be made of members sending in new applications. Write for blanks.

The members of the National Association are respectfully urged to agitate the question of national rate legislation. Write your senators and congressmen.

See to it that your customers belong to the Grain Dealers' National Association.

A thorough knowledge of the Trade Rules is of the utmost importance. Study them.

At the earnest solicitation of the Ohio and Mis-

The Giant Picker is too well known among dealers in the bean districts to need any extended description here.

The Giant Bean Picker is a mechanical device for picking, or separating, the bad beans and splits, as well as stones and other foreign matter from the prime beans, making them grade as hand-picked stock. The machine is a great labor saver and never goes on a strike. Full particulars in regard to this picker can be obtained from A. T. Ferrell & Co., Saginaw, W. S., Mich., who have added a first-class machine shop to their plant to facilitate the manufacture of the Giant Pickers and all repairs for same.

Mitchell, S. D., had a "corn palace" show this year which was opened on September 25 in the presence of 4,000 people by Governor Elrod.

Alonzo Wardall, locally known as "general organizer of the Rochelle Co-operative System," is working among grain growers in eastern Washington urging them to build grain warehouses as branches of the Farmers' Grain and Supply Co. of Spokane.

The C. P. Ry.'s grain agents are a special body of men whose duty it is to patrol the different districts and report to Winnipeg on the existing conditions along the lines. In this way the company has advance information of where a heavy grain movement is liable to occur, and should be able to have cars handy to meet it. The agent must also advise local agents whenever any difficulty arises, and perform such other service as will keep traffic moving as smoothly and as rapidly as possible.

[For the "American Elevator and Grain Trade."]
**COST OF OPERATING A COUNTRY
 ELEVATOR—A SYMPOSIUM.**

BY T. B. MARSHALL.

President Ohio Grain Dealers' Association.

In your issue of September 15 were two articles on cost of handling grain in country elevators, and you ask me "what I know about it." This is rather a difficult question to answer, as no two elevators work under the same conditions. Some use gasoline for power and throw away the cobs from the corn sheller; others use natural gas, which is much cheaper, and at the same time get a revenue from the cobs by their sale for domestic use; others, again, use steam, burn as many cobs as are needed, and most often give away the balance. Then, too, where there are more oats and wheat than corn, it costs less to handle the grain. Corn requires heavier machinery, more room, more power, more help, and therefore means more expense.

Referring to Mr. Stibbens' statement on page 133, I fear he is too low in his cost figures. I do not know where insurance can be had at 1 per cent. In addition, he has added nothing for taxes or telephones, a present necessity; and while he has placed a charge of 6 per cent on his property, he has placed none on his working capital. But the one is as necessary as the other, it seems to me.

In busy times, it requires one man at the scales and books, and one man cannot attend to all the outside work of handling 100,000 bushels a year. If it were evenly distributed, he might do it; but grain does not come that way. It comes in rushes, and the rest of the time the house is practically idle. I would be compelled to add some \$350 to his estimate. This would reduce his profit to \$548. To this must be added the interest, as part of his revenue, and he has a little over \$1,000. According to these figures, it would be better if he were to sell his elevator, loan his money to the purchaser, and take the \$40 per month and do the work. He would then be free from worry over declining markets and fear of fire; in short, he could let the other fellow walk the floor.

The very best figures I can make, not only from my own experience, but from information obtained from other dealers, to run our elevator will cost a fraction over 1 cent per bushel, and this must be under very favorable circumstances. More dealers will be over than under that figure. If, therefore, a dealer is working on a 2-cent basis, he is not doing a safe business. "A laborer is worthy of his hire" under any circumstances. I know there are many farmers who think a margin of 1 cent is enough, but if any individual dealer or corporation attempts the business on that basis, it will only be a question of time until the sheriff will take a hand. But a margin of 3 cents will make a financially sound dealer, and no farmer hauling his grain need fear for a moment that he will not get his money when his crop is all in, without the necessity of making a settlement for every load delivered or of worrying over night for fear a check given at 5 in the afternoon will not be paid when the bank opens at 9 in the morning. It is better far for the farmer to have dealers with good bank accounts than to have them "hanging on the ragged edge," which "bucking a neighbor" always brings.

ANOTHER ELEVATOR EXPENSE ACCOUNT.

By E. R. Ulrich, Jr.

I note with interest in your issue of September 15 an article on the cost of handling grain and the margin necessary to have in order to insure a reasonable profit. We have always figured that—taking it "up hill and down," all items of expense, including wear and tear of elevator, shrinkage in transit loss by misgrading, etc.—when we were getting 2½ cents per bushel gross margin we were coming out about even, and that anything above this was profit.

I have heard that the farmers' companies figure on 2 cents gross as a sufficient margin to make them a profit. At that figure, I believe they will never come out even on a 10-year stretch; and it

is my opinion that the reason many elevator operators are not successful is simply because they have not had enough experience to know what it does cost them to do business, and hence the more grain they handle the worse off they are.

Of course there are cases where the territory is much better than in others and the cost of handling could, of course, be correspondingly reduced; but I think the following statement a fair one for the average conditions for a house handling 100,000 to 150,000 bushels of grain annually:

Figure 6 per cent interest on \$7,500.00 on investment.....	\$ 450.00
Wear and tear, depreciation on building as figured in other lines of business or manufacturing at 10 per cent per annum	750.00
Insurance on elevator.....	150.00
Insurance on grain.....	100.00
Manager—\$50.00 per month.....	600.00
Engineer—\$40.00 per month.....	480.00
Assistant, one-half time.....	240.00
Sundries: Telegrams, telephones, etc.....	100.00

Total \$2,870.00

Now if the elevator does not handle over 120,000 bushels there is a tax of 2½ cents per bushel before you have a shadow of a chance for a profit. These figures are conservative. A great many will say, "We do not figure that way." But the figures will not lie, whether you figure that way or not.

EXPENSES OF GRAIN BUSINESS.

From the Bloomington (Ill.) Pantagraph.

The business of the grain buyer is not all profit, as many believe and as many have been heard claiming to be so agreeable and so desirable. There is more expense to the grain business than outsiders think, as will be proven by the following:

At a meeting of the grain dealers of central Illinois, a paper was read by one of the dealers on the subject, "What Does It Cost Per Bushel to Operate a Country Elevator?" It was in part as follows:

"It will take an average country elevator, capacity of, say, 20,000 bushels corn, with bins for, say, 30,000 bushels oats, this plant with a few cribs for ear corn will cost, say, \$8,000; cash capital in addition to run on, \$10,000; interest on this amount at 6 per cent, \$1,080; an office man's salary at \$60, \$720; elevator man's salary at \$45, \$540; extra help for the year, \$50; office expenses, postage, fuel, lights, stationery, etc., \$60; breakage and necessary repairs, \$50. This calculation is on a basis of, say, 200,000 bushels handled during the year, with shrinkage of ½ of 1 per cent, and insurance to cover should amount to, say, \$500, making the total expense, etc., \$3,000.

"This would mean a cost of just 1½ cents per bushel on all grain handled during the year.

"My experience for more than twenty-five years convinces me that this statement is less rather than more than the average cost to run a business like the above, and I believe that 200,000 bushels is full average of all country elevators in the state."

A TWO-CENT MARGIN NOT ENOUGH.

By Dewey Brothers Co.

It is very difficult for us to give definite figures of the cost of conducting a country grain business. If we handle grain only, it would be quite easy; but at our different elevators we also handle seeds, hay, coal, flour, feed, bale ties, potatoes, sewer pipe, cement, fire brick, lumber, etc. We quite frequently shell corn and grind feed for farmers. It is, of course, impossible to separate the expense so that we can tell just what part of it belongs to the grain business, as the same man looks after all these commodities.

In our opinion, however, any elevator man who goes upon a margin of 2 cents per bushel, both buying and selling, had better go out of business at the earliest possible moment, even if he has to sacrifice his plant.

PROPER MARGINS FOR OATS AND WHEAT.

By J. H. McCune.

The expense of handling grain depends on the amount handled and, to some extent, on local conditions. I find 2 cents a sufficient margin on

oats, when the market is steady; but I consider 3 to 5 cents necessary for wheat, according to price and fluctuations. When wheat is worth \$1, a margin of 5 cents is not excessive. I do not handle corn.

[For the "American Elevator and Grain Trade."]

**RECIPROCITY; OR, RECIPROCAL
 DEMURRAGE.**

BY CHAS. S. BASIL.

Personally I have no serious grievance with any railroad company. I am on the best of terms with all of them, and I count many of their agents as my best friends; and I would not knowingly do anything to hinder them in the prompt and faithful discharge of their public duties, but on the contrary will do all that I can at all times to facilitate their business, knowing that an army of clerks are kept constantly busy figuring with sharpened pencils the cost of operation and that every increased burden put upon the railroad companies the dear people have to pay for. Messrs. Stockem and Bondem must never be held up except on an order of the general manager which, it has been intimated, has at times been given when the insiders wanted to increase their holdings and at the same time secure a few extra suits of lamb's wool clothing.

Much has been written on demurrage by the attorney and employes of railroad companies, and once in a while an innocent or subsidized shipper or newspaper—the earmark is always so plainly visible that you have no difficulty in perceiving it.

The basis of all law is equity and common sense (horse sense, if you please). We are also told that consent makes the laws; also that common usage makes law. Every railroad company, when it receives its charter, is sworn, through its officers, to do nothing in restraint of the principle of competition. Hon. Daniel Sims of the Wabash repeated this statement before the legislative committee on railroads of the House and Senate at Indianapolis last January, and it was assented to by Judge Fields of the Monon and Judge Pickens of the Pennsylvania, both being present. The best attorneys in the country advise that you cannot make a legal contract carrying a per diem penalty for failure to complete a work or service within a specified time unless you also agree to pay a per diem bonus if completed ahead of time. Why, then, is not reciprocal demurrage right?

When the Car Service Association was formed and car service was charged on all cars not loaded or unloaded within the prescribed time, it was said that the charge was made only as a stimulus to the prompt handling of cars by shippers and receivers and not for the purpose of gain or profit to the railroad companies, which are in reality the Car Service Association. It has been stated by every car service man, as well as by railroad attorneys, that the demurrage charge of \$1 a day is only a fraction of the earning capacity of the car when in use, which is generally estimated at \$10 per day. I have read some figures giving a higher earning capacity, and others giving less. Let us say \$10, for example. Now, if the railroad company charges \$1 per day demurrage for all time over forty-eight hours, the shipper or receiver will make an effort to load or unload within the forty-eight hours, but no sooner, if any inconvenience to him, as there is no incentive to erect machinery, employ additional teams, largely increase terminal capacity and do everything possible to expedite the loading and unloading of cars. The railroad companies exact a penalty for failure to unload, but, contrary to every business principle, they offer no pecuniary encouragement to unload ahead of time or in advance of the free time limit.

It would take too long to include all the complaints of the receivers and shippers in one article, and I will, therefore, not go into the matters of bunching cars in transit, delays in furnishing cars when wanted, the furnishing of cars after long waits, when the shipper has his equipment other-

wise engaged against non-competitive points, etc., etc.

The shippers and receivers of Indiana are now paying annually over \$100,000 to the railroads for "car service"—more than the cost of operating this department, or 5 per cent on \$2,000,000. Now suppose the railroad companies were to give us a reciprocal demurrage, where would they be hurt? It has been admitted that where the reciprocal principle has been adopted, or the "average demurrage" plan, which is as near as the railroads ever came to it (under this plan the shipper or receiver gets credit for all the time he saves to the railroad company out of his free time allowance), that the railroad companies received no blood money, as it is called by many shippers, but on the contrary the shippers and receivers had time to their credit and the car service department ceased to be a source of revenue. Now, suppose the railroad companies should give the shippers \$1 a day for every twenty-four hours saved when goods were unloaded before the expiration of the forty-eight hours' free time, and suppose the shippers should get all of this extra \$100,000 now taken from them, and suppose they should get even \$200,000 paid back to them, what would be the result?

First, the Car Service Association would make a very poor showing; possibly an army of clerks, timekeepers, etc., would be turned loose and become valuable citizens by being compelled to produce and not consume.

Second, the railroad companies would show increased earnings for their cars by just nine dollars for every dollar spent to encourage the loading and unloading of cars. This, of course, is based upon the prompt use of the cars when released. Or, in other words, for every \$100,000 expended one million would be taken in. There is no getting away from this proposition, if the railroad companies have been truthful in their statements as to the earning capacity of cars. The further statement of Mr. J. B. McKim, superintendent of the Pennsylvania Railroad at Fort Wayne, who says it costs the railroad companies as much to transport five empty cars as three loaded ones (which is corroborated by other railroad officials), also demonstrates fully that it would be wise on the part of the railroad companies to join in a reciprocal demurrage bill that would be just and equitable to both the railroads and the shippers and receivers.

Mr. Ashley J. Elliott of the Illinois and Iowa Car Service Association should be given another chance to edify his hearers with the old saying: "You can't get blood out of a turnip." I have read this labored effort over very carefully at the request of a personal friend, a railroad official, and failed to find where he scored a single time. His continued effort to smother and avoid facts and figures, to build up straw men to tear to pieces, has necessitated a very voluminous and comic production. As Josh Billings would say, "It is highly amoozing;" but that is all. His analogies are far-fetched and not applicable. It seems to be very difficult to get the average car service man to realize that he is working for a public service corporation, a common carrier, one that is granted its life, or franchise, and, in fact, owes its very existence, to this fact.

Railroads are a public necessity. They are granted greater powers and privileges than private corporations ever had or ever will have. In consideration of the help and protection of the government they are legally subject to government control and regulation and always should be. It will be a sorry day when the government does not exercise this control, and it should be exercised to a much fuller extent that is now being done. Railroads are common carriers and must receive and transport freight from all alike and it would naturally be inferred that they would treat all alike; but they don't. Railroads are not subject to competition as business men and commercial firms are, and their property is not private property to be administered or operated like that of

private corporations or business firms. Why? Because the railroad franchise, its rights of way, its terminal facilities and all its vested rights, have become valuable and are rapidly increasing in value by and on account of the increased population growing up along and near their rights of way and terminals, furnishing them increased millions of tons of freight annually; not on account of the railroad companies having built its line first, but in spite of it. For the people have been obeying the divine command, "Go forth, increase and multiply and replenish the earth;" and they will continue to obey this command unto the end of time. What is the result of this continued and increasing population? The railroad rights of way, terminals and vested rights become increasingly valuable and competitors are barred out in a large measure from reaching the masses except at an extraordinary expense beyond that incurred by the original lines in the field. This, then, compels an increased or higher cost of transportation by the new lines and enables the old lines to issue millions of securities on a basis of its franchise alone and to declare and earn dividends on the same.

How are the people to come into their rights? Not by government ownership and the payment of millions upon millions for franchises which the people themselves have made valuable, but by GOVERNMENT AND STATE CONTROL. I do not believe in municipal or government ownership of anything, if the people will exercise their rights to control and regulate public utilities. If they will not do this, then government ownership must come. I do not believe in anything that restrains competition of a legitimate character, nor do I believe in lessening in any way the chances of reward to individual effort. The persevering, self-denying man, who strives to get up in the world, should not be handicapped, and any law or system that tends to break down this principle endangers the very government itself. "The reward comes not without the labor," and he who labors is entitled to the fruits of his labor or inventive genius. Municipal ownership of all public utilities, if carried out to its fullest extent, would dwarf and kill industrial and commercial enterprises, and the nation would fast lapse into decay and death. Ponder a moment the result of having all artificial light and heat; all bread and meat; all we drink, wear and eat, made by the government, national or municipal; and with this include a free bath and soap. Would not the glories of the old Roman Empire pale into insignificance in comparison? And would not we also soon become even more insignificant than our Roman predecessors?

The very life blood of the nation's commerce flows through the iron arteries of our railroad system. There is at present a deep-seated prejudice against all corporate power, especially that of the railroads. Many abuses are being suffered by the people, some fancied but mostly real. If there ever was a time when care should be used in the management of railroad properties it is now. The people are ripe for the enactment of the most radical legislation, and the danger is that they may go too far in their zeal to correct abuses and resort to persecution instead of corrective measures. Railroads and other corporate bodies should weed out the unscrupulous, unthinking and egotistical officials, as well as the dishonest ones, and strive to get more men not only of principle but men with a heart, and above all those with experience and in touch with the masses, for the management of their corporations. The whole system is top-heavy with high salaried men who do little, while comparatively insignificant salaries are paid to those who are doing the actual work and bearing the burden and heat of the day. This must be changed, and the sooner the better.

The American people recognize more fully than ever the fact that all franchises are valuable just to the extent that the people make them valuable, and they also know that the fabulous wealth accumulated in our banks, trust companies and life

insurance companies belongs to the people, and that by its manipulation untold millions have been made, a large portion of which has not found its way back to the pockets of the people where it rightly belongs.

ALFALFA.

Alfalfa is entitled to some notice as the newest feed stuff, "alfalfa meal" being the latest product put upon the market. But alfalfa itself is far from a new development. It has been cultivated as a forage plant for more than two thousand years. Its Arabic name is hard to account for, since the plant itself came from Central Asia and was introduced into Greece nearly 500 years before our era. It was known to the Romans, and from Italy was transplanted to France and Spain. It was introduced into Mexico by the Spaniards more than three hundred years ago, but did not reach the United States until 1820. In this country it was first known as "lucerne," a name whose origin is doubtful.

In the United States, alfalfa has been grown with more or less success in every state and territory

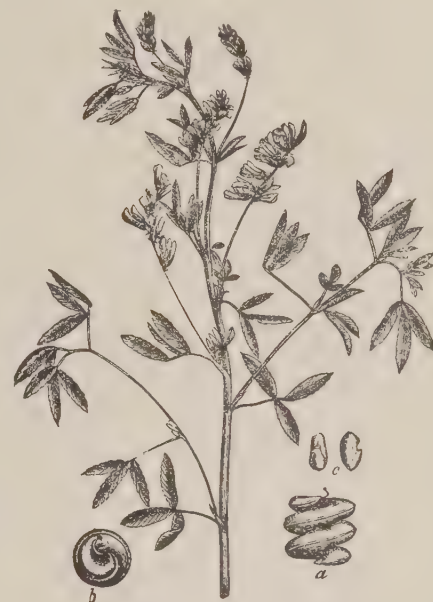


FIG. 1.—Alfalfa; a, b, seed pod; c, seed.

It is the best haying and soiling crop in the West. In the Eastern states it promises to become a rival to red clover, while in the South it has been recommended as a desirable addition to the forage grasses. The introduction of alfalfa meal may still widen its usefulness by making its handling and transportation easier.

Alfalfa, or lucerne, is an upright, branching, smooth perennial, 1 foot to 3 feet high. Its leaves are three-parted, each leaflet being broadest above the middle, narrowly oblong in outline and slightly toothed toward the apex. The purple, pea-like flowers, instead of being in a head, as in red clover, are in long, loose clusters, or racemes. The racemes are scattered all over the plant, instead of being borne, as in red clover, on the upper branches. The ripe pods are spirally twisted through two or three complete curves, and each pod contains several seeds.

The seeds are kidney-shaped, yellowish brown, and average about one-twelfth of an inch long by half as thick. They are about one-half larger than red clover seed, and are of a bright egg-yellow, instead of a reddish or mustard yellow. The ends of the seeds are slightly compressed where they are crowded together in the pod.

Baltimore shippers of grain have agreed to the policy of withholding the names of vessels chartered and the space engaged until the vessels actually arrive to load the grain. This is said to be necessary to protect brokers from other ex-ports.

SUPERIOR-DULUTH INSPECTION WRANGLE.

The attempt of the Wisconsin Grain Commission to force inspection by its agents of the grain arriving at Superior came to a crisis by the issuance on September 28 of a temporary injunction restraining the Wisconsin Grain Commission and its agents from interfering in any manner with the handling of grain at the Great Northern Elevators, the Daisy, Listman, Anchor, Freeman and Minkota Mills.

In the complaint filed by A. D. Thomson, lessee of the Great Northern Elevators, which may be taken as the petition of all the complainants, he says:

That he and his employes are being constantly annoyed and threatened by Wisconsin inspectors who are hampering his business as a grain merchant; that the Wisconsin Commission has seen fit to cause the arrest of one of his men, without giving any thought to the fact that he is conducting a private elevator system; that as a grain merchant, he is liable to be called upon at any moment for a cargo of grain to be delivered at short notice, and with Wisconsin inspectors interfering, such business is badly delayed, which results in monetary loss to him; that his business is purely a private one; and that in the exercise of his legal rights he has the privilege to buy grain in such quantities as he likes in the world's markets, and in the exercise of his freedom of contract a right to make such terms and arrangements with sellers of grain in regard to said grain and samples, or to have the said grain or quality of grain purchased or to be purchased determined by a referred or independent inspection or system thereof, and when so determined and ascertained to have the same shipped and transported and delivered to him without hindrance or delay or interference, and without being subjected to the burdens of any so-called public inspection tax or weighing tax; and that he has the right to receive such grain into his warehouses so designated and to weigh said grain in the manner herein designated, and to clean, mix, scour and otherwise merchandise such grain, all of the same being his own private property; and when so cleaned, scoured, mixed and otherwise subjected to special treatment, he has the right to cause to be weighed out from elevators into boats as herein designated; and has the right to make sales of the same to markets of the world, to his best advantage, and in the making of such sales as between himself and the purchaser thereof has the right to subject the said grain to such sampling or inspection or weighing processes as may be agreed upon between himself and his purchaser in order to determine grade, quality and weight of said grain, and to have the same properly certified in accordance with the customs of the business; and has the right to resist the imposition upon his said grain so owned by him, the burden of any outside so-called public inspection or weighing charges, which are levied or sought to be levied on such grain from, through or by such sources.

After reviewing the appointment and describing the composition of the Commission, Mr. Thomson continues:

That such Commission is illegal and unlawfully constituted in this, that the said defendants Swanston and Shanahan are not now and were not at the time of their said several appointments, and never have been, residents of the state of Wisconsin, and that to constitute the said Commission legal within the terms of the said statute, each of the said commissioners so appointed should, at the time of their said appointment and thereafter, be residents of the state. Plaintiff further avers that the said commissioners have not qualified within the terms and conditions of the said Wisconsin statutes hereinbefore designated.

The cause was argued at great length by counsel and every phase of the question presented. The court, however, held that the Wisconsin law is valid and denied the motion for a permanent injunction.

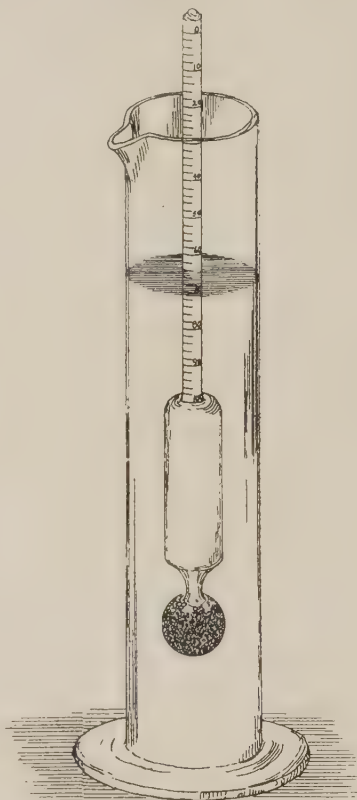
Meantime the Wisconsin department has been inspecting grain daily, the railroads having apparently decided not to interfere with the regular course of the grain, nor do the elevator men seem disposed to make trouble, except that they are said to have notified the railroad companies to have all cars of grain consigned to them inspected in Minnesota and have refused to pay the charges of 25 cents per car for Wisconsin inspection presented through the roads. As it is customary for

the roads to include the inspection in their freight charges, the cost of the Wisconsin inspection has been charged up to the consignees by the roads. As the decision mentioned above gives the Commission power to inspect and weigh grain in private as well as public elevators, the probabilities are there will be no further physical opposition to the Commission's agents, as there was in some quarters prior to the rendering of the decision.

Meantime Minnesota officials are handling the inspection of grain arriving at yards in Minnesota, and of out grain on board the boats after they have left Superior waters.

CALCIUM CHLORIDE SOLUTION IN THE WATER JACKETS OF GAS ENGINES.

The bursting of the water jackets of gasoline engines during the winter time, due to the neglect of emptying the water over night, has been a com-



A SALOMETER.

mon occurrence in the past; and many experiments have been made to place on the market an anti-freezing solution that would not affect the engine in any way, but until recently all these attempts had been more or less unsuccessful, owing to the expensiveness of the article tried or its detrimental effect on the engine. For many years thousands of tons of Chloride of Calcium have been used in ice factories to make the circulating brine, both on account of its low freezing point and because it has no effect on the ice cans, iron tanks, piping, etc., being found much more satisfactory than salt. With the above facts in view, and appreciating that the demand for an anti-freezing solution is increasing, some of the gas engine manufacturers decided to give Calcium Chloride a trial, subjecting it to the severest tests. It has more than answered all the requirements, and being low in price, it fills the long-felt vacancy. The article itself is a hard, white chemical, forming a colorless solution when dissolved in water. It is a by-product of the salt wells, but does not contain salt (or sodium chloride) in any form. It is neutral and will not rust or effect metal of any kind, as every chemist will affirm; any corrosion that may appear to accompany its use being due to impure calcium, against which users should guard.

The freezing point of a solution made by dis-

solving 5½ pounds of Calcium to a gallon of water is 54 degrees below zero Fahr., although 4½ pounds to a gallon, with a freezing point of 17 degrees below zero, will answer in most climates. Owing to its chemical composition it absorbs moisture instead of allowing it to evaporate, thus making it more valuable, as the solution will last all winter—in fact, indefinitely. Should the solution boil and some of the water be evaporated in the form of steam, the Calcium may precipitate on the cylinder, but by adding more water, the latter will again dissolve the precipitate and bring the brine to the correct strength. However, this seldom occurs, as the solution will boil only at 238 degrees above zero Fahr., while water boils at 212 degrees. It is also odorless and will remain so, even if left standing for an indefinite length of time; neither will it form sediment of any kind.

After dissolving the required amount of Calcium in water, it is preferable to test the solution with a hydrometer or salometer. Certain manufacturers have a special salometer for this purpose which they give away free to customers or sell to them at a nominal price. The salometer is marked in degrees salometer. Floated upright in the solution, it sinks to a certain depth, and the depth as marked on the scale indicates the strength of the solution. Five and one-half pounds of Calcium to a gallon of water should test 124 degrees salometer and 4½ pounds to a gallon should test 104 degrees. The table below shows the freezing points of solutions of different strengths:

Commercial Calcium Chloride to Each Gallon.	Degrees Salometer at 60 Degr. F.	Freezing Points, Degr. Fahr.
½ lb.	12	29F.
1 lb.	27	27F.
1¼ lb.	36	25F.
1½ lb.	40	23F.
1¾ lb.	44	21F.
2 lb.	52	18F.
2¼ lb.	62	14F.
2½ lb.	80	4F.
3 lb.	88	—150
3½ lb.	95	—8F.
4 lb.	104	—17F.
4½ lb.	112	—27F.
5 lb.	120	—39F.
5½ lb.	124	—54F.

(The sign — means below zero; all other degrees in last column are above zero.)

Calcium Chloride is packed solid in drums of 650 to 700 pounds. The drums are made of sheet iron, and the Calcium is poured into them in a hot liquid condition and hardens into a stony-like substance when cooled. It must be broken up before dissolving by pounding the drums along the sides with a sledge hammer or axe before opening, the jarring breaking the Calcium into pieces large enough to be thrown into the tank to be dissolved. As it absorbs moisture readily, it will dissolve very quickly, but frequent stirring will quicken the process. It is absolutely necessary to dissolve all the Calcium before starting the engine and the solution then tested with the salometer. Warm water will also help dissolve the Calcium quicker, although this is not absolutely necessary. The metal drum, being worthless, can be thrown away.

Calcium Chloride brine will also be found superior to salt brine for fire barrels in elevators, as it does not evaporate nor rust the iron hoops on the barrels, thus causing them to weaken and finally to burst. It is also a better fire extinguisher and is heartily recommended and approved by every insurance company. In every 30-gallon fire barrel (if full) 135 pounds of Calcium should be dissolved; if 45-gallon barrels, 200 pounds each is required.

The manufacturers, James H. Rhodes & Co., Chicago, whose advertisement will be found in this paper, will gladly give full information regarding their product.

Send us the grain news from your neighborhood.

GRAIN GRADING IN WASHINGTON.

The proposal to raise the standard weight of Washington wheat from 58 to 59 pounds, as suggested by the Washington State Millers' Association, has been rejected by the State Grain Commission. The millers, in a communication to the Commission, said that the grades in rules defining "No. 1 Blue Stem, if cleaned," "No. 1 Red, if cleaned," "No. 1 Club, if cleaned," the amount of dockage should be designated at the same time, sufficient to cover the amount of shrinkage and expense of cleaning; and that all smutty wheat be graded "rejected."

To this communication, which was accompanied by a lengthy argument for the change proposed, the Commission answers in extenso and, at times, quite caustically, and to the general effect that, as the 59-pound standard is more satisfactory to the farmer than to the miller and exporter of wheat, it will have to stand.

However, the action of the millers has led to the adoption of a tentative measure looking to the creation of a scientific system of dockage, and beginning on October 1 the inspection department of the state will attempt for thirty days to fix the true dockage on each car of wheat inspected. Should the work prove satisfactory to all parties, it will be made a permanent part of the inspector's duty to fix the dockage at Seattle, Tacoma and Spokane. The question of dockage has been the source of much friction between the east side grower and the west side buyer, and recently the Millers' Association decided to place the dockage claim for smut at from 5 to 20 cents a sack, and the growers protested that this was too much.

As the Grain Commission has no authority to fix prices directly or indirectly, the experiment will simply endeavor to fix the number of pounds which should be deducted from the weight of the wheat. This action appears to be entirely satisfactory to the millers.

There was also a sharp difference of opinion as to the value of smutty wheat which, the millers said, could "by no known process be made No. 1 after cleaning." The Commission did not agree with this opinion, although the chief inspector of Minnesota had advised them that—

There are no concerns here which make a practice of cleaning smutty wheat except the mills, and then just prior to the grinding. The millers wash their wheat to get rid of the smut just before they put it through the rollers.

Wheat can be cleaned of smut to a great extent by scouring, but this is not a satisfactory way of handling smutty wheat for grinding, because it does not remove all of the smut but glosses the berry over with smut so that when the miller attempts to wash it the smut does not all come off.

Thereupon the Commission concluded that:

This letter makes plain beyond contravention these points:

First. Smutty wheat is used by millers and by the best millers in the world—those of Minneapolis.

Second. Smutty wheat can be thoroughly cleaned by the washing process. For otherwise these great mills would not use it in their flour.

Third. If the berry is No. 1 in every way excepting for smut, that berry, when it is thoroughly cleaned of smut by washing, is, in fact, and should be in name, No. 1 wheat. Wherefore it unavoidably follows that the state designation now used, "No. 1 if smutted," is correct in name because correct in substance.

To which the millers, by President A. M. Ingersoll of the Washington Millers' Association, replied: "So far as the question of the relative value of smutty wheat, as compared with No. 1, is concerned, it will never make a nickel's difference to any member of the Millers' Association, exporter or grain receiver on the one hand, or the farmer, interior grain buyer or dealer on the other, whether smutty wheat is graded as it is now and always has been by the state, or as requested by the millers, exporters and receivers; and, for that matter, aside from endeavoring to get our grain trade on this coast as nearly as possible in harmony with the customs and rules

which govern in older and larger markets, it is wholly immaterial to any of us whether the state department decides to conform to its present grading of smutty wheat or makes the change as suggested."

In other words, the wheat must in any event sell for what it is worth and no more and no less.

JOHN C. KLEIN.

Sixteen miles southwest of Chicago is situated the thriving little city of Blue Island, at the junction of the Rock Island, the Grand Trunk and the Chicago Terminal Transfer Railways. It has also a spur of the Illinois Central, and while not distinguished as a manufacturing point gives employment to a large number of men in brickmaking, the manufacture of wire cloth and goods, and also in the shops connected with the freight terminals of the roads above named.

Blue Island has always been an important trading point, but as a majority of the farmers in the adjacent territory are milk shippers, the grain



JOHN C. KLEIN, BLUE ISLAND, ILL.

trade was for many years a small factor in the business life of the town. In 1892 Mr. John C. Klein, having attained his majority and achieved an ambition to manage a business of his own, was enabled to buy a modest feed store on the retirement of the former owner, which for ten years he carried on energetically and conservatively, each season adding to his customers from a wider scope of country.

To-day as one steps from the train on arrival at Blue Island, on either the Rock Island or the Illinois Central railways, the first building to attract attention is Mr. Klein's elevator and feed mill, located on the tracks of the Rock Island Railway, which has a capacity of 25,000 bushels. It was erected in 1901, and his expanding trade keeps the plant running at full capacity at all seasons.

By square dealing and prompt deliveries Mr. Klein has gained the full confidence of the trade, not alone of Blue Island but also of Morgan Park, Riverdale, Dalton, West Pullman and Harvey, and all of these points are supplied mainly by him; and in favorable crop years the farmers who formerly hauled corn and oats to other points west of Blue Island now sell their grain at Klein's elevator; and it is a fact that this enterprise has aided the general trade of the town quite materially.

Illustrative of Mr. Klein's business sagacity it is in order to mention one of his late achievements in organizing the O. K. Stock Food Company, of which he was elected president. He had for five years previously been selling an average of more than \$500 worth yearly of stock food of a brand known only to the local trade, and this volume of business made such an impression on him that

the above named company was started to combine not only the stock and poultry food manufacture but that of insecticides as well; and purchasing the business and good-will of D. J. Lambert of Apponaug, R. I., the company at once began a campaign of judicious advertising, and as the product is strictly high class, a trade is being developed which is sure to mean the success of the venture. The company's stock and poultry foods are held at higher prices than many competing lines, but win on merit whenever a comparative test is had, while the "Death to Lice" goods are sure exterminators of vermin which infest both stock and poultry.

It is safe to say that Mr. Klein is at the head of one of the largest establishments devoted to the flour and feed trade in the southern suburbs of Chicago, and it is so quietly and systematically carried on and managed that few of his townsmen have any real ideas as to its value to their city.

[For the "American Elevator and Grain Trade."]

HOW TO PROTECT THE GRAIN IN CASE OF AN ELEVATOR FIRE.

BY W. H. PERRINE.

The question of how best to protect the grain in an elevator from damage by fire is a most important one to every owner or operator of a wooden elevator. There are numerous appliances invented for the prevention of fire, many of which are valuable, but despite the utmost care, fires occur and the saving of the grain is almost as important as the prevention of fire. Grain burns very slowly and fire itself rarely does much damage to grain beyond impregnating it with the odor of smoke. The greatest damage is done by water, as the average fireman's idea is to get the fire out as quickly as possible, regardless of the damage done to the contents of a building. The consequence is that the grain is thoroughly soaked, and the damage depends on how long it is left in the ruins before being handled and dried.

There is always less damage by fire to grain that is in bins whose bottoms rest on the ground, as the fire cannot get under it, and as soon as the fire burns down to the grain line it stops and thus requires less water to put it out. Therefore, an elevator whose principal storage is separate from the handling part of the house and whose bins rest on the ground makes a better risk than an elevator where all of the bins are supported on timbers from sixteen to twenty feet above the ground. The Santa Fé Elevator was of the latter construction, and while the fire started in the top of the building, the entire ground floor was afire and the bottom of the bins burned out before the grain was released.

This illustrates the importance of having the employees of an elevator thoroughly drilled to understand that when a fire starts and gets beyond control, every bin should be opened to let the grain run onto the floor. This would prevent any fire getting underneath the bins and thus prevent or greatly lessen the damage to the grain and reduce the amount of water necessary to put out the fire. Then, if the firemen can be prevented from unnecessarily flooding the grain, a very large per cent of the salvage can be saved in fairly good condition.

ERIE CANAL ENLARGEMENT.

The New York State Canal Board has let several contracts for work on the 1,000-ton barge canal, and work has begun on most of them, chiefly in the way of dredging on Hudson and Mohawk rivers. The work planned for the coming season calls for the expenditure of \$6,000,000 to \$10,000,000, the latter being the limit of the appropriation now at the disposal of the canal authorities. Before the work can advance beyond this point, the legislature must authorize the expenditure of another portion of the \$101,000,000 estimated as the total cost of the improvement. The next legislature will be urged to make such an appropriation without delay.



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., OCTOBER 15, 1905.

Official Paper of the Illinois Grain Dealers' Association.

TERMINAL DOCKAGES.

The movement of the Missouri Railroad and Warehouse Commission to gain control of the weighing of grain in all terminal elevators of that state has had one good result at least; it has revived active opposition in and out of Kansas City to the offensive 100-pound dockage per car allowed the terminal elevators from the weight recorded by the scales. This dockage is illegal in both Missouri and Kansas, but the grab nevertheless has been allowed the elevators by the rules of the Kansas City Board of Trade.

One of the first duties of bodies like the public grain exchanges, which are always in the limelight of public criticism, is to obey the existing laws of the states in which they operate. They should also pay some attention to the public opinion of the trade.

The abolition of the 100-pound grab would not be burdensome to the terminal elevators. This fact is so well established that in all first-class markets, excepting Kansas City and New Orleans (unless lately changed here), the tare has been abolished by the exchange rules without waiting for state laws to do so, or those rules have reduced the tare to a merely nominal amount; while the National Association long ago voiced the opinion of the grain trade as a whole by adopting at the Milwaukee convention of 1904, without objection, the advisory committee's resolution condemning all arbitrary dockage.

The Kansas City Board certainly will have little sympathy from the grain trade in its fight to maintain control of the weighing if it persists in defying the laws of both states and public opinion also in this matter of a petty dockage for the benefit of a few receiving ele-

vators; and the Board's continued countenance of the jug-handled "contract" which shippers are compelled to agree to with receivers, in order that the latter may evade the penalties of the law, is certainly beneath the dignity of a self-respecting and fair-minded commercial exchange.

THE EXPENSE ACCOUNT.

The expense account has so direct a bearing on the fairness of the margins to be taken by grain buyers, that we should have been glad to see a more convincing discussion of the subject of the cost of operating a country elevator than appears in this issue. It so happens that the question has been brought into prominence in central Illinois particularly, where many of the co-operative companies are located, by some discussion of the topic in the local newspapers. It is, of course, a subject that individuals are wary of discussing from a personal standpoint, for obvious reasons; yet a thorough presentation of the facts would be worth while, not only as a means of awakening grain dealers themselves to the necessity of better and more systematic management to keep their own expenses down, as well as to establish the fact that the current margins taken by grain dealers are in the main entirely fair and no more than a co-operative company must itself take to successfully "play even," to say nothing of paying dividends. And as the only *raison d'être* of the co-operative is to act as a corrective against the alleged "excessive" margins taken by the regular dealers, the best way for the latter to answer a charge of unfairness is to show just what it actually does cost to handle grain.

STATE WEIGHING, ETC.

The Missouri Railroad and Warehouse Commissioners, in a communication printed in another column, offer a justification of their recent action at Kansas City in relation to the weighing of grain. This paper is quite willing to admit that the Kansas City Board has permitted much it ought not to have countenanced; and adds that the sympathy with the Board in the present situation, expressed by this paper, is based entirely and solely on the presence of the state as weighmaster.

The assumption that the state is justified in arbitrarily constituting itself an umpire, as inspector or weigher, in a transaction in grain sold by one individual to another, is *per se* unwarranted. The law giving the state such power is no more to be justified than would be one directing the state to meddle (outside the courts) in trades between buyers and sellers of dry goods, groceries or other commodities. And the law in the first instance has no logical sanction in the fact that grain exchanges appoint both inspectors and weighers of grain to perform what is in the nature of things a private and not a public service, in which dealers in grain alone are interested, and which by general agreement they look to the exchanges and not the state to perform, except where the state *vi et armis* has usurped control, as in Missouri, Illinois, Kansas, etc.

Even the usurpation might be tolerated were

it not a notorious fact that the state service in such matters has been almost universally bad, or, at least, unsatisfactory, to that portion of the public directly interested—rarely is as good as that rendered by the exchanges themselves, whose members are much more directly interested in good service than are employees of state bureaus responsible to "the public," which is no responsibility at all.

This, of course, is along general lines, in explanation of an expression of sympathy. That state departments exist by virtue of state law is true, more's the pity, and there is no reason to expect that in the states named there will ever be a return to board inspection; and that under the pressure of an offended and suffering grain trade they are improving their methods is undoubted. It is gratifying to see that the Missouri Commissioners at least fully realize their own responsibility and the delicacy of their position and are aiming to give a service they can defend on its merits.

CONTROL OF THE HAY ASSOCIATION.

"Will shippers dominate the National Hay Association?" is a query propounded by the Flour Trade News. Well, even a cursory glance at the list of officers chosen at the Toledo convention last summer would seem to indicate that they are dominating the Association's affairs. At least, they control the organization.

For several years the shipper-members of the Association have complained—perhaps quietly, but nevertheless bitterly—that the National Hay Association has been controlled by and purely in the interest of a "certain clique of hay men, principally receivers." This feeling has long pervaded the ranks; and the undercurrent of dissatisfaction had grown appreciably, until just preceding and during the convention at Toledo it was said openly in groups that, "If those receivers get themselves elected to the principal offices again this year and put the same bunch of people on the chief committees, it surely will mean that the Association will go on the down grade and probably be disrupted." It certainly is to be regretted by everyone who takes an interest in the Association and appreciates its services, even in a small way, that affairs in its executive circle should have been interpreted in this light.

In organizations of any kind it is a truism that the great majority of the membership is content to stand by on the outskirts of the crowd, taking no thought as to its own responsibility, but complaining loudly, even rancorously at times, of what the real workers are doing. Criticism is, of course, good; but criticism with practical suggestions from members who are working for the best interests of the Association is immeasurably better.

The adverse criticism aimed at previous administrations has not come from shippers alone; it has been only too general among commission men as well. Possibly there may be some ground for criticism, and more or less evidence of its bases of truth, mostly of the circumstantial variety, however. But be that as it may, the shippers have had always the privi-

lege of voting "aye" or "no"; and if they were dissatisfied in the past with a commission man identified with any "clique" for president or any other office, it was their right and privilege to vote "no" instead of "aye."

The desire for a purely shippers' regime has been years in attaining growth; and at the time of the Toledo convention last July, the warning chord had been struck, which was in a measure heeded by the nominating committee when it recommended for election as president, first vice-president, second vice-president and secretary-treasurer men who are and have been for years shippers of hay. With or without the principal committees filled from their ranks, the shippers have it now in their sole control to make the National Hay Association one of the greatest commercial factors that has ever been developed; and as they have their hands on the throttle they will be held responsible for the work of the Association during their term of office.

RATE LEGISLATION.

Shippers throughout the country, as well as of Ohio, were much disappointed at the attitude of Senator Foraker in his speech at Bellefontaine on September 28. As a "key-note," the speech seemed to be the Senate's challenge of the President's position on the transportation question, and as such was sharply criticized.

The senator rehearsed all the familiar platitudes. He said the Elkins law had abolished rebates, or would do so if properly enforced; while as for discriminations, these were merely matters of detail which the spirit of the law would correct without further legislation save a revision of the text. He rehearsed also the familiar arguments against giving the Commerce Commission power to make rates, a proposition that Mr. Foraker ought to know shippers do not advocate and have expressly repudiated. And in demolishing this "man of straw," he said, of course, that rate making is a matter of extreme delicacy, the work of only the "brightest and most skillful men," and so on, forgetting that President Stickney, a few days before, in his testimony before Judge Bethea, at Chicago, had said: "It is unfortunate that the men who make rates are not mathematicians instead of fairly good guessers."

Senator Elkins of Virginia is much more satisfactory. He has concluded as a result of his summer's touch with the people that "there must be railroad legislation this winter." His own idea is for the reference of all traffic disputes to a court of interstate commerce. This is practically the same proposition as that of Judge Grosscup, who would create a transportation department to have the sole duty of investigating and prosecuting all complaints of discriminations, unjust rates and unfair practices of every description by the railroads, and, if unable to settle these, to present the complaints to a special court of transportation, the judges of which will be required to devote their entire time to traffic questions.

The difference between Senator Elkins and Judge Grosscup seems to be one more of de-

tail than anything else; and the proposition of either would, if suitably developed, be satisfactory to the shipping interests, no doubt. The latter ask simply that there be created a tribunal for the speedy and cheap adjudication of disputes between shippers and carriers. No such court now exists, and the expense of adjusting a difference of this kind by the present machinery of the Commerce Commission, costing, as it does, from \$500 to \$1,000 for each case, even of one of the simplest character, practically puts it beyond the power of individuals of moderate means to obtain relief, unless their causes be prosecuted by trade associations or other organizations of individuals.

THE NATIONAL ASSOCIATION.

Those who are of the opinion that the Grain Dealers' National Association is moribund may take counsel of the showing made by the Association in the communication of its secretary, printed on page 197. In spite of the knocks it has received at the hands of old friends in the past year, it has a pretentious list of direct members, to which recently have been added 25 new names; and it has also reasonable expectation of considerable accessions to the direct membership from the South and Southeast as the result of the special work now in hand. The defections now are, as a year ago, only those of the Western affiliated associations.

These, there is reason to hope, will return to their allegiance in due time. The real wide-awake dealer will want to get the benefit of the interstate work done by the National; and how can he get it cheaper than by paying \$1 to his state secretary as his share of the state payment to the National? When the National shall have fully renewed its visible existence and as well demonstrated its potential power by some conspicuous service to the grain trade, its full recovery will be as rapid as was its decline in 1904-5. The National's friends are justified in their hopes of its future.

THE LOADING FEE.

An Omaha paper says that grain dealers in Nebraska have begun an agitation for a loading fee allowance from the railroads, at competing points, especially. It is argued that if the terminal elevators are given an unloading allowance, the country dealers also are entitled to one for loading the grain. This is, of course, correct reasoning; but Nebraska grain dealers may well pause before insisting on the allowance for themselves, even should the unloading allowance be not withdrawn from the terminal houses, as it should.

The Commerce Commission has said the unloading allowance is not illegal, because, in effect, it is payment for a "public service which a carrier is bound or undertakes to perform." The carrier in the Peavey case maintained that unloading the grain is a service it is bound to perform, and that, finding it cheaper to do so, it elected to pay one of its own shippers to perform this service rather than itself to operate the transfer elevators.

Suppose, then, the doctrine were carried to its limits. The conclusion would be either that a loading fee should be paid to each country

house or that the country and terminal elevators alike should be operated by the railroads directly, both being by the reasoning declared to be public facilities for handling grain, required to be provided for the public use, as are all other freight depots. So then the general public would have the right to demand the use at will of the country houses, as they would the terminal elevators also, both being railway property; and, of course, the scooper, the farmer, the farmers' company—any and all kinds of grain shippers, would have the same legal right as actual owners would have to use all elevators enjoying the loading fee, as they would any freight depots, loading platforms or other facilities offered the public by the railroads for assembling and delivering freight of all kinds for transportation to destination.

So, while the loading fee may have a beguiling look on the surface, it has its drawbacks when worked out to its logical conclusion, legally speaking. The theoretical question, it is true, is still an unadjudicated one, although the tendency of collateral decisions is in the direction we have hinted at; but useless agitation, the chasing of rainbows like this loading fee, might force it into the courts where there is no telling what may happen. Better let it alone.

THE EVERLASTING SHORTAGE.

Hitherto we have had the everlasting shortage explained by the man at the terminal—the weighmaster, the inspector, the railroad man, or, perhaps, the "secretary." Now, however, we have had, in the admirable and very interesting articles contributed to this and the September issues of the "American Elevator and Grain Trade" by Harry W. Kress, a statement of the case based on the personal observations of a shipper who, "taking a day off," so to say, and combining a vacation with a purpose to know the truth, spent many days in the yards at Toledo, in what must have been an exciting, not to say fascinating, search for grain cars arriving in perfect physical condition.

One is at a loss to see how he can add to the force of the lessons Mr. Kress' experiences teach. As to the remedy, Mr. Kress has touched the keynote in saying that the chief cause of loss is due to the imperfect rolling stock supplied by the carriers and to the rough and tumble way cars are handled en route. This condition of things can probably be corrected only by the united action of the trade proceeding as a body to enforce the collection of claims for losses, large and small, which the individual could not afford to prosecute on his own account. Corporations are like individuals—very jealous of forced appeals to their pocket-books; and so the systematic prosecution of damage suits for bona fide losses might make a difference in the managerial attitude toward the grain car of commerce.

Shippers who are interested, as all should be, in national legislation on the transportation question should write their representatives and senators outlining what they want, and so bring to bear all the pressure possible upon members of Congress.

EDITORIAL MENTION

The Commerce Law Convention will assemble at the Auditorium, Chicago October 26.

The car famine has its influence on hardening money rates, as all delayed grain has to be carried by the dealer and his banker.

The last crop report reduced the estimate figures to "centals"—a new fad of the department that gives one that very tired feeling.

Look over your elevator equipment now and see that it is in good repair and of sufficient capacity to handle the new corn economically.

New directories of the regular grain dealers of Wisconsin and Kansas have been issued by Secretary M. H. Potter of Wisconsin and Secretary E. J. Smiley of Kansas.

The trail of the country barn builder who quit his job to build wheat elevators in the Northwest is pretty well blazed this fall by the houses that gave way under pressure of full bins.

When you have an elevator to sell and are hunting a buyer, advertise for him in our For Sale column. It goes to the men you want to reach, and is practically certain to bring you a customer.

The Ohio Grain Dealers' Association's claim bureau is now in full operation. The rules were published in this paper in the July issue and copies can be had of Secretary J. W. McCord at Columbus.

The state of Georgia has enacted a new reciprocal demurrage law, similar to that of Virginia, the rules and regulations governing demurrage to be prepared and promulgated by the state Railroad Commission.

"Don't come ahead" with new corn. A perishable commodity that carries 30 per cent of moisture (20 per cent in excess of safety) is as dangerous to tamper with, financially speaking, as a match in a powder mill.

The sixth regular fall meeting of the Ohio Grain Dealers' Association will be held at the Hotel Chittenden, Columbus, on Friday, October 20. An interesting program will be prepared. The session will begin at 10:30 a. m. and conclude in time for all to leave for home on the night trains.

Washington has a man "with wheels" in the person of E. M. Dinsmore, president of a farmers' society of Sprague, who says: "It is my intention not only to arrange for the handling of our wheat and produce, but to try and start a movement to have our own store, our own mill and, in fact, control everything the farmer has to buy or sell." If Mr. D. should

order all the rest of the world, except farmers, to "go to," where would the latter get off at?

The seismograph some time ago seemed to indicate a coming shake-up in the Chicago grain office; but up to this writing no actual disturbance has occurred.

The meeting of the Kansas Grain Dealers' Association, which was to have been held on or about October 17-18, has been postponed on account of difficulty of getting hotel accommodations at that time at Kansas City.

And now there's "blood on the moon" in Nebraska, it being charged that the farmers' elevators in York County have "joined the trust" and are working with "a perfect agreement or understanding as to prices;" and the officers of the companies do not deny the impeachment. Such good sense, however, was rather unexpected in that quarter.

It is a queer commentary on the business system in grain dealers' offices that Secretary Wells of Iowa should be able to say, as he does in a recent circular:

In making up claims for our members, I find that many independent dealers are not in the habit of keeping a file of their correspondence and making copies of their own letters. It is very important in making claims to have the correspondence as well as all other original papers. I wish to urge the use of the letter file and copying press.

The tendency of the railroads to enlarge the size of their cars is of course apparent, and, in a way, it is to be encouraged; but as the H. L. Strong Grain Company complains to the Missouri commissioners, this tendency has the disadvantage sometimes of forcing shippers to use the big cars when those of moderate size only are needed. For example, it is an arbitrary hardship to force a dealer to pay the minimum on a 60,000-pound car (or larger) when there are only 25,000 pounds to ship. Either the roads should be required, as they reasonably might, to furnish cars of moderate size on due requisition, or a minimum rate rule should be established to suit the necessities of the smaller shippers or buyers.

The Minnesota inspection department's method of inspecting grain afloat by waiting until the grain has come from Superior into Minnesota or neutral waters and then taking samples for the inspectors will probably not commend itself to the Eastern buyers on "certificate final" contracts. Nor is it at all likely this kind of inspection will go far to induce the Buffalo Millers' Club to "call off Shanahan," as, it appears, Duluth wheat shippers and elevator owners are urging the Club to do. Mr. Shanahan is not likely to be "called off" by the men who were instrumental in getting him on the Wisconsin Grain Commission, where his presence alone is a sufficient guaranty of the competency and fairness of that Commission and its work. The fact that Shanahan, the most conspicuous figure on the Commission, is the one man desirable from the Duluth point of view to have "called off," at once puts the elevator men who are fighting

the Wisconsin Commission on the defensive when the merits of that fight come under discussion and review.

Again the Dominion government will be asked to suspend for a season the coasting laws to permit American vessels to haul Canadian grain to the Atlantic seaboard. Whenever Canadians want something right bad, as they now want vessel room for wheat, they are ready to "forget and forgive," but the government always manages to turn down these requests. Besides, at this particular moment, American shippers have no tonnage to loan.

Representatives of the Scottish Co-operative Wholesale Society, Ltd., of Glasgow, traveling in this country, when asked about co-operation in the United States, said they did not think it practicable, because the country is too large and the interests of the workingman too discordant. But the probability is that the real reason is the better incomes of Americans. Certain good people are indeed greatly distressed that other people should make a profit in trade and commerce, as in grain, for example; but the fact is that the average American workingman or farmer has not yet been reduced to the necessity of clipping pennies into half-pence in order to live within his income and save something.

The aggravations of the Southeastern grain trade have led the Memphis Grain and Hay Association to adopt the rule to enter suit against all people who violate their contracts with members and force the collection of damages, no matter what the amount may be. It is probably true that this is the only way to put a stop to the outrageous disregard for business obligations which characterizes many retail merchants in the Southeast. Once this class of traders is convinced by demonstrations of the kind named that the Association means to enforce in the courts the rights of its individual members, it is reasonable to believe that the personal behavior of retailers will be reformed along the line of "honesty is the best policy," at least.

The admirable work done by the Iowa Grain Dealers' Association in developing the famous seed train method of popularizing expert agricultural knowledge, has had its reward not alone in blazing the way for similar popular lectures in many states of the East, West, South and Southwest, but in increased crops of corn in Iowa and in all parts of the corn belt where the lectures were best attended. The "Seed Corn Harvest Day" of Iowa (October 10), through a suggestion of Prof. Holden, may be credited to the same propaganda and will, like the seed trains themselves, be copied by other corn states and add its influence to teach farmers the benefit of selecting seed in the field early in the fall rather than from the crib in the spring. These services of the Iowa Association to the farmers of that state have been of incalculable value. If all the greed charged by the co-operative company promoters against the Iowa Association were true and tenfold more were added to it, still the Iowa farmers would be in the debt

of the Association, counting this seed train work alone.

Pittsburg receivers complain that some shippers of hay are plugging cars, which show well at the doors, but turn out very poor at the ends. This is risky business, as all informed shippers ought to know, especially so this year, when the difference in the value of the best and the worst is so great that shippers take greater chances than ever when they mix a car up in the manner above described. "Some ends of cars have been sold in this market recently at less than bedding prices," says the Reporter, which adds:

Another phase of the poor quality of hay has been a surprise to some of the dealers here. This phase is sour hay. Some cars have a very fair appearance, unloaded by good people who do not detect the taint until some days after the car was handled. The value of such sour cars can be best imagined by shippers who are generally feeders of some stock themselves.

In a certain western terminal there were recently arrested two men charged with having in their possession many sacks of wheat, said to have been stolen. One of the men arrested explained that the grain was that which had spilled over the doors of grain cars while loading at the elevators or which had run out of the loading spout upon the ground; and that he had taken the grain with approval of the elevator superintendent. It did not appear that the man had knowingly been dishonest in carrying off the grain, which accumulated at the rate of a bushel and a half a day, perhaps; but when he says that one of the weighmen in the elevator offered to supply him with capital to buy a few hogs to fatten on the grain, the situation was full of possibilities of frequent "bad spills." The arrests in this case were no doubt sufficient to restore in that particular market a wholesome respect by the yard men for even "spilled and dirty" grain which belongs to the elevator, whose foreman should and doubtless will look after it more closely hereafter.

The Bloomington Pantagraph quotes the manager of a farmers' elevator company as saying that "the regular grain dealers and the grain trade papers have modified their attitude toward the co-operative movement." For one, we beg leave to differ. This paper has always contended, as it does now, that co-operative companies, being simply corporations organized under the state law, have a legal and ethical right to do business, but that they have no moral right to behave like pirates by doing business for less than cost and taxing the loss to the stockholders. It has also been maintained that there is a question whether a company organized with the penalty clause in its by-laws is a legal commercial corporation in this state; and this question was of so uncertain character that the last convention of the state association of farmers' companies refused to authorize the employment of an attorney to give an opinion on it. Why? Because they did not dare to go on record, preferring to take the remote chance that someone might attack such a company in the courts to test the question. The regular grain dealers and this paper, at least, are ready to accord the co-

operatives all their rights; but they do rightly protest when the co-operatives exceed those rights and presume on the latitude usually accorded farmers' companies and labor unions to carry on their business in illegitimate ways—moral or legal—and make honest competition and respectable business methods impossible in their neighborhood.

Speltz is not suited to the needs of the flour millers, at least the Operative Miller insists it is not, and persists in denouncing the practice of mixing it with wheat as inexcusable. It shud join our green competitor in a petition to the Agricultural Department for a law to forbid the growing of speltz. We are confident that both of them working harmoniously together cud induce the department to exceed its authority and enact the law.—Yellow Journal.

It is possible for the "green competitor" to be several kinds of a dampfool at one and the same time, perhaps; but never the particular kind that would imitate the yellow grain dealers' journal of Chicago, which in its issue of August 25, in concluding a weighty discussion of "speltz" and the Operative Miller's attitude toward it, made (page 235) this preposterous suggestion:

"If you cannot learn to recognize speltz, demand that the Agricultural Dept. pass a law forbidding the growing of speltz."

Under the circumstances, this precipitate desertion of the Operative Miller by the yellow paper suggests that probably the office boy has returned from his vacation and is editing the paper again.

The question of the removal of the internal revenue tax on the manufacture of alcohol used in the arts is one that may well interest the grain dealer in the corn belt because of its relation to the marketing of corn. There seems no good reason why there should be a tax on alcohol used in our chemical industries, which are handicapped in their competition in direct proportion to the amount of the tax. On the Continent, as is well known, free alcohol has been the means of creating a great industry in the manufacture of drugs and chemicals, and at the same time given an immense impetus to the production of the potato from which the alcohol is distilled. The amount of alcohol consumed on the Continent as fuel and in motor engines also is enormous. Free alcohol would act in the same way here—benefit many industries by giving them at least one free raw material and relieve the demand for gasoline which is rapidly approaching a prohibitive price for many uses other than motoring. And as corn is probably our best material for the manufacture of high wines, free alcohol denaturized would unquestionably stimulate the sale of corn in proportion to the enlarged demand for alcohol.

The United States Circuit Court at St. Louis recently rendered a decision in a suit involving the right of a carrier to subject grain to the orders of the consignee holding the bills of lading without authority from the shipper. The complainant alleged that 200,000 bushels of corn shipped by him to New Orleans were there dried, the shrinkage in weight amounting to about 11,900 bushels, for which he claimed damages of \$5,954, as

well as reimbursement for the charge of drying, amounting to \$1,371, which he was obliged to pay before the railroad would deliver the cars. The complainant held that the railroad, having turned the corn over to a drier without his orders, was responsible for both the shrinkage and the cost of drying; but the court held with the railroad that the latter properly acted upon the orders of the consignee, and was obliged also to have the corn dried before it could be admitted to the elevators as grade No. 3 under the New Orleans exchange rules. The decision adds materially to the legal status of the drier, and also makes it necessary, perhaps, for shippers to make stipulations as to the drying of grain in their instructions to consignees.

It is said the Pennsylvania Company has gone back on its agreement with other shippers and the carriers, not to revive the "uniform bill of lading," discarded at the New York conference in March last and in accordance with the stipulations with the Commerce Commission in December, and is about to force it upon its shippers in a slightly modified but quite as vicious form. Shippers will therefore do well to be on their guard against this bill. Indeed, there seems to be more or less use of the uniform bill in central territory with shippers' assent thereto, strange as that may appear. For it does not seem possible that sane shippers who know what they are doing will deliberately sign away their rights of recovery for loss and damage in transit. Yet that is just what a man does who accepts the uniform bill of lading without paying extra for its "insurance." It is really most disheartening to the men who are trying to reform these transportation abuses to have shippers, too ignorant to know their own business or too indifferent of their rights, thus overturn all the work of reform thus far accomplished and handicap that of the future.

The uniform bill of lading committee will meet this month at Virginia Hot Springs to renew the negotiations by carriers and shippers for the making of a new uniform bill of lading. The grain trade, thanks to the petty economical streak of certain Western grain associations, which temporarily disorganized the National Association and diverted it from its work to a struggle for existence, is wholly unrepresented in that body, whose proceedings must be of the highest importance to grain dealers in all parts of the nation; nor are we aware that there is any way to remedy the oversight, except to act through representatives of other shipping interests. The latter will, of course, protect grain dealers as well as themselves in the matter of the carriers' common law liability for loss and damage, and perhaps also as to its form of the bill to permit its use as an order bill and so protect current collection methods of grain dealers by perpetuating the negotiable character of the bill of lading,—these things other shippers present at Virginia Hot Springs may do for the grain trade, but the trade ought not to have permitted the formation of the shippers' half of the committee without seeing that a grain trade representative was a member.

TRADE NOTES

H. W. Tuttle, Chicago, has charge of the western agency of the Nagel Gas Producer, the main office of which is in New York City. Mr. Tuttle designs and erects plants.

Sprout, Waldron & Co. of Muncy, Pa., report a large demand for Monarch Attrition Mills. This mill is daily gaining in popularity and the makers are rushed to keep abreast with orders.

The power for the portable grain elevators employed at the Santa Fe Elevator in loading the salvage grain into cars is secured from five gasoline engines furnished from the shop of A. H. McDonald, Chicago.

The Great Western Manufacturing Co., Leavenworth, Kan., has a bargain list of new and second-hand machinery which will be sent free to grain dealers and millers who write for it. The list contains 25 pages, and mentions a great variety of elevator and mill equipments.

It is announced that the Strong & Northway Manufacturing Company of Minneapolis is to build a brick and reinforced concrete structure, 66x150 feet, to be used as a machine shop. The building, which will cost \$50,000, will be equipped with a complete line of modern machinery.

Catalogue C, of the Raser Gas Engine Works, Ashtabula, Ohio, is dated August 1, 1905, and is the latest catalogue issued by the company. It is 9x6 inches in size and contains 15 pages. The Raser Engines are described fully and anyone contemplating the purchase of a vapor engine should send for a copy of this book.

The shops of the Robinson Manufacturing Company at Muncy, Pa., are working full time on orders for mill and elevator equipment. The departments devoted to the manufacture of the Unique Attrition Mill are particularly busy, and the number of rush orders constantly being received is very gratifying to the company.

The Temple Pump Company has an 84-page catalogue describing the "Master Workman" Gasoline Engine and showing the many uses to which it has been adapted. The greater part of the book is taken up with testimonials of users of the "Master Workman," and numerous photographs of the engine in use are shown. A copy of the catalogue will be sent free on request.

The Wolf Co. of Chambersburg, Pa., reports a larger number of contracts booked and under way than ever before at this season of the year. These contracts include orders for power and transmission machinery as well as elevator and mill equipment. A complete equipment of electric motors has been installed for driving the Philadelphia branch shops at night, thus doing away with the operation of the large Corliss engines for night work.

One of the most important developments in the grain trade at the present time is the rapidity with which the various railroads are installing drying and conditioning machinery at important grain terminals. Several of these installations have received mention in these columns and now comes the announcement that the Chicago, Milwaukee & St. Paul Railroad has placed an order with the Hess Warming and Ventilating Co. for a No. 6 Hess Drier and Cooler, to be placed at the Coburg Elevator at Kansas City, where it will be used by the Simonds-Shields Grain Co. This is the sixth drier of this kind installed in Kansas City, and estimates are now being taken for a seventh, to be erected at Harlem for the C., B. & Q. Railroad. Not to be behind other roads with Atlantic Coast terminals the Chesapeake & Ohio Railway has placed a rush order for a large Hess drying and cooling equipment for its export elevator at Newport News, Va., and it will be completed early in November. This is the third drying plant under

construction at Atlantic ports, and negotiations are progressing for the placing of others. The Hess Warming and Ventilating Co. report an unprecedented call for driers, and are working night and day to complete contracts. The recent demonstration by the Department of Agriculture of the efficiency of the Hess Drier in expelling garlic from wheat has given a fresh impetus to the demand for these machines.

The importance of well-filled fire buckets as a safeguard against the spread of incipient fires is too well understood in the grain trade to require much argument. The only important point is to impress elevator owners with the necessity of keeping the fire pail in the best possible condition for instant use. The Carbondale Chemical Company, in their advertisement elsewhere in this paper, call attention to the use of calcium chloride solution in the place of salt brine for fire pails. The advantages claimed are that it does not evaporate, does not become foul and does not freeze at low temperature. Elevator owners who are interested should address the company for further information.

In its investigation of the natural resources along the Northwestern line the industrial department of that company has had its attention called to a situation at a northern Nebraska point that in a way indicates what the future of this western country may provide to the industrial world. The point referred to is a city having a population of about 1,200 people located on one of the great rivers of the state. This river affords at this location a very desirable water power site with capacity estimated at 4,000 horsepower. This splendid power could be used in many ways to great advantage. It would be especially valuable for the generation of electric power that could be turned to manufacturing purposes.

Elevator owners and others interested in power transmitting, elevating and conveying machinery should write for a copy of the new 12-page circular issued by the Kingsland-Kay-Cook Manufacturing Company of St. Louis, Mo. The circular is 13½x10¼ inches in size and shows halftone illustrations of many of the specialties made by the company. Pulleys of all kinds, shaft hangers and couplings, elevator boots, belts, cups and conveyors, chain drags, etc., are shown in various styles. The Kingsland-Kay-Cook Manufacturing Company is operating two large plants at St. Louis and is in a position to accept for prompt delivery contracts for complete equipments of any magnitude. The company also carries, ready for immediate shipment, one of the largest stocks of standard goods in the United States. Prospective buyers are invited to submit their specifications for special quotations. The company employs a competent corps of engineers and is prepared to design and install complete equipments of power transmitting and labor saving machinery in any section of the country.

RATES IN KANSAS.

The Kansas Railroad Commission has been at work for the past six months compiling comparative tables of freight rates in Kansas and other states, and has published a comparison of the rates paid in Kansas compared with the average of rates paid by Colorado, Texas, Nebraska, Iowa and Illinois. In nearly all the comparisons made Kansas is shown to be paying a higher rate on butter, poultry, eggs, salt and lumber, but on grain, flour, hay and cattle the Kansas rates seem to be as low or lower than the average rates of the states named. For example, here are the rates to important market centers in Kansas:—

	For 40 Miles.	For 100 Miles.	For 250 Miles.
	Kan. Average.	Kan. Average.	Kan. Average.
Grain	6.80	6.74	15.20
Flour	7.10	7.39	10.91
Hay	5.60	5.84	9.50
			15.48
			14.50
			13.96

For carload lots the following rates:

	For 20 Miles.	For 60 Miles.	For 100 Miles.
	Kan. Average.	Kan. Average.	Kan. Average.
Grain	5.70	5.76	8.05
Flour	6.00	6.19	8.25
Hay	5.00	5.73	8.00
			8.89
			10.20
			11.14

[For the "American Elevator and Grain Trade."]

TRACK SALES VS. CONSIGNMENTS.

BY F. S. RUTHERFORD.

While it is true that track bidding is usually on a basis of No. 3 or better grain, it is equally true that track bidders will not bid on a basis of that inspection unless they are satisfied that the grain in the section bid is of good quality; and though they bid for "3 or better," they fully expect to receive a goodly proportion that will grade No. 2. As a matter of fact, the greater proportion of grain shipped from country points in the expectation that it will grade 3 or better is No. 2 in quality; and if consigned to a commission merchant the shipper would derive the benefit thereof. But the universal custom among track bidders of bidding for No. 3 or better grain has about convinced the shipper that his country does not raise grain of any higher quality, until, perchance, he may be induced to consign some on the market. Hence, it is no material concession in the interest of the shipper that the track bidder is willing to buy his grain as No. 3 or better.

True it is that if a shipper sells a contract grade (No. 2) of grain for future delivery in any of the central markets he can not deliver No. 3 on contract at the contract price; but he can practically deliver it on the contract at a small discount by having his commission merchant sell the misgrading shipments in the cash market and in the same market buy an equal quantity of contract grain to make up the shortage. It is not to be supposed that the shipper will have his commission merchant deliver misgrading grain on a contract for No. 2 at the established penalty when he can get a better bargain otherwise. Except in isolated instances, there is only a very slight difference in values of Nos. 2 and 3 wheat, corn and oats in the central markets, as is evidenced by the telegraphic report of the Chicago market for cash grain on August 31, 1905, in which are the following quotations: No. 2 red wheat, 80½c; No. 3 red wheat, 78c to 80c; No. 2 corn, 54c; No. 3 corn, 53½ to 54c; No. 2 oats, 25c; No. 3 oats, 24½c. Now, if a dealer shipped wheat he expected to grade No. 2, it must be a very high No. 3, even if not up to the No. 2 standard; and his commission merchant would most likely sell it at about the highest quotation on No. 3 red. The difference in values of Nos. 2 and 3 corn and oats is so insignificant at all the central markets that the shipper need not lose sleep over the grading of those grains.

The matter of possible manipulation of the speculative markets need have no terrors for the interior shipper wishing to hedge against any grain he may have running to market on consignment, for it is almost invariably the would-be manipulator, instead of the hedger, who "walks up to the captain's desk to settle." The would-be manipulator may for a time put the price above the legitimate value of the commodity, and so make a nice fat figure for the shipper to hedge at, but the much-dreaded and advertised corner generally collapses. How many successful grain corners have there been in the past ten years? Taking all the primary markets of the United States into consideration and counting the manipulation in wheat, corn and oats, not ten, and probably not five. So how can it be that country shippers have been hurt to any considerable extent in their hedging operations?

A practical illustration of hedging by the interior shipper is found in results that were attainable in the St. Louis wheat market on the red winter wheat crop this season. As for instance: On the first day of July track bids for No. 2 red wheat were basis 87½c to 90c, St. Louis delivery, the inside figure for 20 days' shipment and the high figure for immediate shipment, at which time the St. Louis cash market was 91½c to 94c and September ranged between 85½c and 87½c. Say the interior shipper, instead of selling at even the outside bid of 90c, St. Louis delivery, had con-

signed wheat on that day and sold September wheat in St. Louis as a hedge. His wheat would have arrived and sold in the St. Louis market of about July 5 at a price between 94c and 95½c, and he would have bought in his September sale at between 84½c and 87¼c, at least coming out even on his hedging, and would have netted about 5c per bushel more than the track bidder was willing to pay him for his wheat. There were a number of other opportunities for the shipper to realize 3c to 4c per bushel better by consigning and hedging than by selling on track bids through the month of July.

Or, if the shipper on August 1, 1905, had contracted wheat of the farmers for 20 days' delivery at the country station, when cash No. 2 red was selling in St. Louis at 85c to 86½c and the September option at a range of 81c to 82¾c, and had hedged by selling September, suppose that within the 20 days the wheat were all delivered at the country elevator, gradually loaded and shipped and arrived and sold in St. Louis about August 21 and 25, when cash No. 2 red was selling at 84½c to 85½c to 86c, and the September option at 77c to 77¾c and 77½c to 78½c, he would have got within ½c per bushel of the cash price ruling. September option at 77c and 77¾c and 77½ to 78½c, he would have got within ½c per bushel of the price ruling on the day he contracted of the farmers, and he would have made a profit of about 4c per bushel on his hedging sale of September.

There are several classes of track bidders. There is the buyer who owns or controls an elevator at some terminal market, who in times past has received terminal concessions from the railroads, or a cut in the freight rate, or possibly both, that enabled him to put out very attractive bids. There is the buyer on export or domestic shipping account, who bills his purchases direct to the ocean port or to domestic point of consumption or distribution, and who, too, has enjoyed material favors at the hands of the railroads, that enabled him to pay more for grain than he could do otherwise. Then there is the commission merchant at the primary market who finds the specially favored track bidders wresting his hard-earned business from him, and he is tempted into putting out bids, too, in order that he may hold some little of his old trade; but this last described track bidder finds it an unequal fight.

Take away from everyone all special freight rates and allowances for elevator charge, thus placing all on an equal footing, and the grain business from the interior will naturally seek the primary markets on consignment, as it did in years gone by. And the interests of the farmer, the interior grain dealer, the railroads, and of all, except a handful of firms who have heretofore been enabled to monopolize the grain trade of the United States through rate favors, demand that the grain business be handled through the primary markets. At the primary market a market value is established for grain. The track bidder does not help to establish this market value; he merely uses it as a basis for his bids to the country. He does not come into the primary market and buy, and by his purchasing create a competition that would naturally establish a higher range of values for cash grain. The interior shipper may think he is doing well to secure from the track bidder ½c per bushel more, perhaps, than his grain would show to net if consigned on the market; but does he ever consider that if every shipper would consign his grain to primary markets and so compel the exporter, the domestic shipper and the miller to go there for supplies, a competition would be formed that would put prices on a higher level, and make a healthier market generally?

The writer of this article has been connected with the grain trade for some thirty-five years, as an interior shipper and in the commission business at St. Louis, Chicago, Milwaukee and Peoria, and it has been his experience and observation that the interior shipper who consigns his grain to primary markets the year round, hedging or no hedging,

makes more money than he who follows up the practice of selling on track bids. Independent of hedging against his consignments by selling options, the country dealer frequently ships on a steady market, and his shipments will arrive on an advancing market as often as they will strike a decline.

Then, again, the true commission merchant will work hard for the interests of his shipper, and that in many ways. The shipper bears the relation of client to his commission merchant, but when that shipper minimizes competition of buyers in the primary markets by supplying the export, domestic shipping and milling demands of the country by selling to track bidders, he contributes to minimizing grain values in primary markets, and so limits the usefulness of his commission merchant.

In what sort of a dilemma would the interior shipper be if there were no primary markets to establish values and make possible the publication of market reports and price-currents, and the dissemination of market prices and news? Deprived of market reports and news of the primary markets mailed and telegraphed daily by the commission merchants, the interior grain dealer would be groping in the dark, not knowing whether the track bidder were paying full value for his grain. As a matter of reciprocal principle, should not the commission merchants who founded and maintain the primary markets be entrusted with the handling of the grain business of the country?

AMERICAN RECIPROCITY TARIFF LEAGUE.

Chairman Packard, of the National Reciprocity Conference, has announced the names of the self-perpetuating committee of fifteen to take charge of the formative work to carry out the aims and purposes of the resolutions adopted by that Conference. These are as follows: A. B. Farquhar, York, Pa., A. B. Farquhar & Co.; T. J. Hagenbarth, president National Live Stock Association; E. N. Foss, Boston, treasurer Sturtevant Company; W. A. Harris, American Shorthorn Breeders' Association; Conrad Kohrs, Montana, cattleman; Murdo MacKenzie, Colorado, president Stock Growers' Association; W. C. Maybury, Detroit Board of Commerce; John Miller, Duluth, grain elevator operator; J. D. Oliver, South Bend, Ind., plow manufacturer; Bartlett Richards, Nebraska; A. H. Sanders, Chicago, Sanders Publishing Company; G. H. Schwab, New York, representing shipping interests; W. E. Skinner, Chicago, manager Live Stock Association; E. O. Stanard, St. Louis, Stanard Milling Company; John E. Wilder, president Illinois Manufacturers' Association.

This committee met at Chicago on September 14, and, as directed by the Conference, organized the American Reciprocity Tariff League, electing following officers: Chairman, A. H. Sanders; vice-chairmen, E. N. Foss, W. A. Harris, John Miller; secretary, W. E. Skinner; treasurer, John E. Wilder.

The committee also adopted the following resolutions as indicative of the purposes of the organization:

Resolved, That the several and respective bodies—agricultural, mercantile and manufacturing—represented in the Reciprocity Conference, be and are hereby requested to call mass meetings in their respective localities to discuss the resolutions adopted by the National Reciprocity Conference and to take such action by memorial to Congress or to their representatives as may seem most effective.

Resolved, That the executive committee be instructed to prepare and present to Congress the recommendations of the Reciprocity Conference held in Chicago, August 16 and 17, and that they urge necessary legislation for the enactment of a maximum and minimum tariff law with the present Dingley law rates as the maximum.

While the national organization of the League is composed of the fifteen members only, appointed by Mr. Packard, it is authorized to increase that number, and it will ultimately have at least 30 members. The names of the other fifteen are yet to be announced.

Send us the grain news from your neighborhood.

[From "Wochenschrift für Brauerei," Berlin.]

TENDENCY OF GRAIN TO ABSORB MOISTURE IN STORAGE.

BY DR. J. F. HOFFMAN.

During the present year 1905, a number of complaints have arisen of the unusual tendency of new grain of different kinds, which were harvested in a very dry state, to grow damp in storage, or even during conveyance to the consumer. This is particularly the case with rye, parcels of which have left the grower in good condition, but arrived at destination damp and moldy. Now, dry grain always exerts a greater power of attracting moisture than such as is already somewhat damp; for instance, if two lots of grain, one containing 10 per cent of moisture, the other 15 per cent, be exposed to a damp atmosphere, a given weight of the former will take up more moisture than the latter in a given time, and at the same time will become hotter through the heat given off by the condensation of the absorbed moisture. This in turn increases respiration in the grain, and thus generates more heat and moisture, so that eventually the originally drier grain may become damper than the other, as well as more liable to mold and grow hot if improperly stored.

After the first stage of rapid absorption of water vapor, comes one during which the heat generated earlier begins to drive off the water again, the latter then depositing in the cooler places and producing the phenomenon known as "sweating."

Another process coming under consideration is that of dew appearing on cold grain when exposed to warm, damp air. That this formation of dew does occur, though masked by absorption, can be shown by storing cold grain in an iron bin or discharging it down an iron chute pipe. The outer surface of the metal will become covered with dew, which finally runs down in streams. Moisture absorbed in this way will also give rise to heating and sweating. An interesting example of this dew formation is afforded by certain granaries known to the author, where in the winter season the stored grain cools to a temperature many degrees below the freezing point of water. When the outer temperature rises, the windows and other openings are invariably closed, and it is found that the outside of the windows becomes covered with rime, which persists for a long while after the cold weather has departed, owing to the great cold inside and the slowness with which equalization of temperature proceeds. If the windows were left open the same deposit would take place on the grain, and all the conditions for damp, fustiness and mold would be present.

The foregoing considerations help to explain the above-mentioned tendency of 1904 grain to grow damp in store. In the granaries the grain continued to dry during the autumn and cool down, though, as the temperature would remain somewhat higher than that prevailing out of doors, little moisture would be absorbed until the turn of the year. As the outdoor temperature rose in the spring and the air became laden with moisture, the amount absorbed by the grain would increase progressively and to a dangerous extent, the warmer air depositing its moisture on the cooler grain, in the form of dew. This would be succeeded by heating and sweating, thus affording a suitable opportunity for mold germs to develop. Moreover, the act of turning or handling grain in damp weather or in a damp room increases the absorption of moisture and oxygen, and thereby facilitates the chemical processes manifested in the generation of heat and moisture.

The city council of Kansas City has authorized the Missouri Railroad and Warehouse Commission to erect scales on Liberty Street near Twelfth Street in spite of the mayor's veto.

"Enclosed find money order for \$2.50 subscription for 'American Miller' and 'American Elevator and Grain Trade' for one year. We could not think of running business without these papers."—E. A. Cameron.

CANADA MALTING COMPANY.

The Canada Malting Company of Toronto is one of the most extensive concerns of the kind in the Dominion, operating malting plants in five Canadian cities. Among the latter is the new plant at St. Henri, near Montreal, shown in the accompanying engraving. It replaces an older malt house and is entirely modern, being an eight-day generating Saladin-Prinz Pneumatic System plant of 2,000 bushels' daily capacity.

The buildings, which were erected by the Barnett & Record Company of Minneapolis, consist of the malt house proper, covering a ground area of 100x180 feet, with one annex, 57x14 feet in size, for hard

The president of the National Association and other prominent speakers will be present, and it can be said quite positively that it will be greatly to every dealer's advantage to be present.

ANOTHER DRIER ON THE ATLANTIC COAST.

Newport News follows in the wake of Baltimore, New Orleans, etc., and has placed a rush order with the Hess Warming and Ventilating Co. of Chicago, for the immediate construction of a large Hess drying and cooling plant to be completed early in November. The order comes from the Chesapeake & Ohio Railway, through W. S. Upshur, agent in

service. If sold at Omaha for the seaboard, the Omaha-Chicago lines pay the elevation to get the car back at Chicago. The railroads control the elevation and are willing to pay to get their cars back to have them in service again.

"It is the grain men in the state who have a choice of two roads which are demanding the elevation charges. The claim they must be allowed the elevation before they can compete with other dealers. They try to force the roads to grant an elevation charge on the plea that they will ship by the other road if the charge is not allowed. The railroads, however, are standing pat and none is granting the allowance."

WEIGHING AND RATE INSPECTION AT CLEVELAND.

The Cleveland (Ohio) Weighing and Rate Inspection Bureau has been placed directly in charge of the Joint Rate Inspection Bureau of Chicago. The Cleveland business has for seventeen years been in charge of a local committee of the various rail and water lines of that city, and the recent change is calculated to materially improve the inspection service. There are but two other important points in Central Freight Association territory where affairs are in charge of an independent bureau, but these are soon to be reorganized and put in charge of the general bureau.

A grain inspection bureau has been established at Cleveland, in line with the reorganization. The circular issued shows the same transit privileges as apply in other cities. All carload grain coming into the city must be registered upon arrival if shippers contemplate moving to points beyond. After this registration grain can lie in elevators for six months. When reshipped the shipper will be entitled to a through rate from the shipping point to the place of destination. Transit privileges are accorded only to grain originating in territory in which there is through billing via Cleveland, excluding commodities which already have had full transit privileges.

F. H. Montgomery, who organized the old bureau and has been joint weighmaster from the beginning, has been appointed district inspector under the joint rate inspection bureau.

Indiana grain dealers, in Shelby County, at least, report wheat badly infected with weevil.

G. W. Gwynn of Essex is believed to be the first grain man in southwestern Iowa to begin handling the 1905 corn crop.

Wheat was dull to-day. Armour seems to have the average speculator scared. Trading is light in consequence.—Zahm & Co., October 7.



MALT HOUSE OF THE CANADA MALTING CO. AT ST. HENRI, QUEBEC, CANADA.

coal storage, and another, 66x14 feet, for soft coal; office building, power plant, etc., and the elevator.

The latter structure consists of a brick and steel working house with car shed and eleven fireproof tile grain storage tanks. The working house is 24x24 feet, car shed 16x40 feet, and the tanks are 24 feet outside diameter and 90 feet high.

The site of the plant being on the Lachine Canal, a greater depth of excavation was necessary to secure permanent foundations, which are of concrete, resting on a mattress of reinforced concrete covering the entire surface of the excavation. Upon this the walls of the working house and the several tanks rest.

The working house, of brick, contains the elevator legs, scales and cleaners for both barley and malt. The storage tanks are of the reinforced tile and concrete type, made familiar by the recent work of the Barnett & Record Company, the material being a special patented semi-porous hollow tile made to conform to the circle of the wall, with special channel tile in which the reinforcing steel bands are embedded in concrete, so that there is no exposed surface of steel in any part of the grain storage portion of the structure. The spaces between the large tanks are also used for storage, giving a total storage capacity of 375,000 bushels.

The Canada Malting Company will erect at Winnipeg another malting plant of 1,000 bushels' capacity, with elevator for 250,000 bushels. The same system of malting will be used, and the Barnett & Record Company will erect the buildings.

SOUTHWESTERN DEALERS.

All regular grain dealers, commission merchants and railroad officials are invited to attend a general meeting to be held in Moberly, Mo., Friday, October 20, 1905, 1:30 p. m. The Merchants' Hotel will be headquarters and the meeting will be held in this hotel or the Merchants' Club Room.

charge of the elevators, which are operated by the Chesapeake & Ohio Grain Elevator Company.

The drier will be erected in Elevator A, and will put the port in position to handle export grain that arrives out of condition on the same terms as Baltimore, New Orleans and the other ports equipped with grain driers.

Mr. Upshur expects a large business next winter and is preparing to take care of it properly.

OFFICIAL AGENT OF SHIPPERS.

D. D. Campbell has been appointed official grain shippers' agent at Winnipeg, the commission running from the Dominion government. He began his duties on September 15.

Mr. Campbell has been a resident of Manitou for over twenty years, and owned and operated for many years an independent elevator in that town. He has also been an extensive cattle buyer and conducted an independent lumber business.

DEALERS WANT A LOADING FEE.

"Interior grain men who own elevators in Nebraska are complaining that they do not receive fair treatment in the matter of elevation charges; and as the railroads are standing pat there is liable to be trouble before the bumper crop is moved from the state to the markets of the world," says the Omaha Bee. "Not only elevator men, but buyers who load on cars, claim they are entitled to an elevation charge in the state, which would make a third elevation on Nebraska grain billed to the seaboard.

"As the situation now stands, if a grain dealer at a common point in the state ships his grain to Omaha, and if the grain goes on east to have the grain transferred from a Western car to a car of the Chicago roads, the Western roads are willing to pay an elevation to get their car back into



He doesn't know which to believe. One minute they tell him Armour is buying; then he hears that Armour is selling. He likes to follow Armour, but finds it hard work. We say, trade and act upon your own judgment. Buy, if you think wheat is going higher; sell, if you don't.—Zahm & Co., October 7.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of September, 1905:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	391,477	514,350	276,051	
Corn, bushels.....	423,564	247,815	334,499	45,394
Oats, bushels.....	1,847,955	391,666	825,240	50
Barley, bushels.....	771	817		
Rye, bushels.....	304,022	55,831	25,714	
Timothy Seed, lbs.....	16,681	31,177		656
Clover Seed, lbs.....	109	2,710		161
Hay, tons.....	6,646	5,298	1,124	719
Flour, bbls.....	296,271	169,829	173,502	114,290

BOSTON—Reported by Daniel D. Morris, acting secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Flour, bbls.....	183,726	130,015	74,923	43,871
Wheat, bushels.....	2,347	49,800	21,872	181,269
Corn, bushels.....	1,774,929	215,725	1,358,924	93,783
Oats, bushels.....	851,304	1,058,918	235,977	21,355
Rye, bushels.....	3,503	3,248		
Barley, bushels.....	934	833		
Flaxseed, bushels.....		550		
Mill Feed, tons.....	845	1,449		
Cornmeal, bbls.....	2,450	4,000	116	572
Oatmeal, bbls.....	7,807	9,123	7,275	3,060
Oatmeal, sacks.....	8,555	12,860	6,800	250
Hay, tons.....	13,580	13,710	2,223	169

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	2,368,458	1,214,018	454,904	
Corn, bushels.....	6,233,555	6,404,893	443,800	
Oats, bushels.....	1,775,395	2,601,983	1,153,974	
Barley, bushels.....	1,486,196	1,141,430	325,736	
Rye, bushels.....	140,000	210,450	41,962	
Timothy Seed, lbs.....				
Other Grass Seed, lbs.....				
Flax Seed, lbs.....			19,685,888	
Broom Corn, lbs.....				
Hay, tons.....				
Flour, bbls.....	1,270,139	878,865		

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	4,128,154	4,128,154	973,115	1,962,423
Corn, bushels.....	14,801,346	14,801,346	10,432,942	12,361,629
Oats, bushels.....	7,419,925	7,419,925	5,820,071	3,071,094
Barley, bushels.....	3,530,087	2,580,087	451,142	311,683
Rye, bushels.....	280,087	280,087	29,550	37,726
Timothy Seed, lbs.....	17,614,055	17,614,055	3,624,000	6,676,460
Clover Seed, lbs.....	918,662	918,662	177,710	393,621
Other Grass Seed, lbs.....	1,161,686	1,161,686	7,397,990	7,282,796
Flax Seed, bushels.....	308,171	308,171	34,336	119,795
Broom Corn, lbs.....	306,942	306,942	407,326	515,770
Hay, tons.....	19,807	19,807	1,096	1,251
Flour, bbls.....	636,419	636,419	801,111	410,719

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	411,397	132,439	327,372	132,231
Corn, bushels.....	283,268	724,510	190,829	415,176
Oats, bushels.....	751,350	589,451	79,582	386,672
Barley, bushels.....	18,190	25,102	80	3,000
Rye, bushels.....	53,576	40,546	9,990	5,787
Timothy Seed, bags.....	22,062	30,606	6,957	11,039
Clover Seed, bags.....	3,471	2,224	540	1,505
Other Grass Seed, bags.....	18,151	13,864	12,994	12,296
Flax Seed, bushels.....				
Broom Corn, lbs.....				
Hay, tons.....	11,774	10,011	7,178	4,767
Flour, bbls.....	163,322	103,627	120,530	77,866

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	137,981	80,871	29,228	18,076
Corn, bushels.....	507,835	550,393	301,342	376,278
Oats, bushels.....	320,691	1,262,243	659,577	826,011
Barley, bushels.....	5,425		9,241	1,479
Rye, bu. and other cereals.....		1,644		3,625
Flaxseed, bushels.....				
Hay, tons.....	4,611	4,142	708	1,071
Flour, tons.....	5,493	5,475	1,686	2,160

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	230,362	424,377	32,848	24,413
Corn, bushels.....	424,481	750,559	110,065	67,201
Oats, bushels.....	690,299	1,028,431	50,656	266,171
Barley, bushels.....	120,000	84,259		
Rye, bushels.....	220,253	98,144	123,567	52,820
Flour, bbls.....	39,000	36,400	18,800	

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	6,006,654	4,120,391	3,128,686	1,688,625
Corn, bushels.....	73,324		82,123	
Oats, bushels.....	1,316,933	1,883,688	506,440	105,346
Barley, bushels.....	2,735,279	2,238,158	1,575,047	577,046
Rye, bushels.....	159,106	238,508	12,465	119,680
Flax Seed, bushels.....	504,111	399,099	1,441,799	1,030,626
Flour, bbls.....	695,410	385,630	625,310	393,015

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	5,919,000	6,344,100	5,406,000	4,734,500
Corn, bushels.....	1,268,000	891,000	1,342,000	856,800
Oats, bushels.....	625,500	474,000	450,000	208,800
Barley, bushels.....	106,000	89,000	80,000	36,000
Rye, bushels.....	33,000	37,000	2,000	12,800
Flax, tons.....	5,600	1,600	800	
Hay, tons.....	9,010	16,480	1,960	2,940
Flour, bbls.....	305,360	248,500	367,010	283,415

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,339,360	1,017,200	156,215	169,048
Corn, bushels.....	194,600	133,000	125,350	100,495
Oats, bushels.....	1,038,500	929,900	740,950	304,500
Barley, bushels.....	2,638,400	3,306,000	753,153	905,254
Rye, bushels.....	105,600	168,800	53,000	89,320
Timothy Seed, lbs.....	273,367	467,685	59,800	484,000
Clover Seed, lbs.....	223,134	340,535		197,955
Flax Seed, bushels.....	16,980	32,400	9,365	
Hay, tons.....	1,156	1,876	12	
Flour, bbls.....	305,360	248,500	367,010	283,415
Feed, tons.....				

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....			716,000	32,000
Corn, bushels.....				
Rye, bushels.....				

MINNEAPOLIS—Reported by G. D. Rogers, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	12,725,310	8,926,510	2,141,250	1,829,290
Corn, bushels.....	117,580	172,150	39,660	24,760
Oats, bushels.....	4,397,960	5,663,880	1,010,080	629,700
Barley, bushels.....	3,052,290	2,400,500	1,267,810	885,780
Rye, bushels.....	249,470	291,800	109,220	70,380
Flax Seed, bushels.....	1,100,420	1,034,130	308,860	266,120
Hay, tons.....	2,600	3,373	60	57
Flour, bbls.....	15,941	12,457	1,549,867	1,298,352

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,205,119	634,079	1,003,299	430,862
Corn, bushels.....	884,284	1,223,945	1,079,672	1,410,309
Oats, bushels.....	459,804	329,419	584,052	100,332
Barley, bushels.....	664,608	12,681	328,680	18,290
Rye, bushels.....	121,139		121,021	
Flaxseed, bushels.....				
Flour, barrels.....	91,397	106,266	126,978	186,256

NEW ORLEANS—Reported by Fred Muller, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	380,400		112,000	
Corn, bushels.....	65,200	30,000	117,023	45,365
Oats, bushels.....	117,000	135,000	61,325	10,995
Rough rice.....				
Clean rice pockets.....	28,235	31,877	15,601	
Hay.....				
Flour, bbls.....	54,675	49,222	120,922	52,943

OMAHA—Reported by A. H. Merchant, secretary of the Grain Exchange.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	805,000	375,000	785,400	375,000
Corn, bushels.....	1,654,000	520,000	3,457,300	520,000
Oats, bushels.....	588,000	270,000	600,000	270,000
Barley, bushels.....	37,000	35,000	44,000	35,000
Rye, bushels.....	18,000	43,500	9,000	43,500

PEORIA—Reported by R. C. Grier, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	42,800	106,400	27,200	95,500
Corn, bushels.....	1,090,200	1,103,000	606,000	450,200
Oats, bushels.....	1,071,700	885,700	1,297,200	693,100
Barley, bushels.....	148,500	267,100	73,800	165,700
Rye, bushels.....	26,400	24,000	11,300	8,000
Mill Feed, tons.....	510	712	3,671	3,781
Spirits and Liquors, bbls.....	11,275	7,295	53,011	48,725
Syrups and Glucose, bbls.....	4,350	7,550	9,860	10,210
Seeds, lbs.....	210,000	450,000	150,000	120,000
Broom Corn, lbs.....	150,000	30,000	115,900	30,000
Hay, tons.....	4,300	5,130	580	1,070
Flour, bbls.....	113,850	61,800	94,650	82,320

PHILADELPHIA—Reported by Charles F. Saunders, secretary of the Commercial Exchange.

Wheat, bushels.....	455,439	301,066	124,000	
Corn, bushels.....	471,364	140,186	481,345	59,314
Oats, bushels.....	1,852,222	639,839	680,000	
Barley, bushels.....	1,600	3,200		
Rye, bushels.....	1,443	6,400		
Timothy Seed, bags.....	1,744	1,330		
Clover Seed, bags.....	269			
Flax Seed, bushels.....	29,600	55,200		
Hay, tons.....	7,120	7,280		
Flour, bbls.....	228,615	174,411	102,516	117,305

ELEVATOR AND GRAIN NEWS

ILLINOIS.

Orin Palmer has sold out his grain business at Kemper, Ill.

Kaiser & Co. have sold their grain business at Milmine, Ill.

Farmers are agitating a grain elevator proposition at Virden, Ill.

Elmore & Lemon have bought the Greenleaf Elevator at Hillview, Ill.

Schultz & Baujan have completed a new grain elevator at Kampsville, Ill.

Elmer Fish has the contract for building a new grain elevator at Bonfield, Ill.

The new grain elevator at Pleasant Hill, Ill., is expected to be completed in October.

George Keyser has succeeded Pendleton & Keyser in the grain business at Mt. Sterling, Ill.

Louis Kolb & Son have completed arrangements to build a new grain elevator at Marine, Ill.

The new grain elevator at Island Grove, Ill., commenced operations the last part of September.

F. W. Stine is building an addition on his grain elevator at Gilman, Ill. The building will be 32x80 feet.

A grain elevator will be built at the new town of Whittaker on the I. I. & M. Railroad, near Kankakee, Ill.

The Farmers' Elevator Co. commenced work in September on the foundation for a new grain elevator at Cropsey, Ill.

The Highland Grain Co. is now operating the elevator at Kinsman, Ill., formerly owned and operated by J. T. Hart.

The Interstate Elevator, owned by the Erie Railroad, resumed operations for the cleaning and clipping of grain September 30.

Bartnick & Son Co. have been incorporated with a capital stock of \$5,000, to engage in the grain and feed business at Chicago, Ill.

Hitch Bros. of Champaign, Ill., are making arrangements to rebuild their grain elevator at West Ridge, Ill., which burned recently.

Samuel Iddings and Henry Adams have leased the farmers' elevator at Atlanta, Ill., and are conducting a grain business at that point.

The grain elevator at Orleans, Ill., recently destroyed by fire, has been rebuilt and commenced operations the first part of October.

Buckley & Pursley of Peoria, Ill., have torn down their old elevator at Norris, Ill., and are replacing it with a new and modern house.

The Western Export Co. has been organized at Peoria, Ill., and will ship principally grain, feed and foodstuffs. The capital stock is \$10,000.

The Smith-Hippen Co. of Pekin, Ill., has built an extension on its grain elevator at Emden, Ill., to facilitate the elevating and loading of grain.

The grain firm of Davison & Sprinkel of Rock Falls, Ill., has been succeeded by Fred E. Davison. Mr. Sprinkel retires from the firm on account of failing health.

Price & Barton are rebuilding the grain elevator burned some time ago at Tower Hill, Ill. They expect to be ready to handle the corn crop by the first of November.

The Farmers' Elevator Co. of Lowder, Ill., has been incorporated with a capital stock of \$6,000. The incorporators are Geo. W. Conlee, Ed. Plowman and Lloyd Bullard.

The Hedfeldt Co. of Chicago, Ill., has been incorporated with a capital stock of \$10,000 to deal in grain, seeds and feed by A. T. Hedfeldt, A. G. Johnson and A. R. Newberg.

Rosenbaum Brothers of Chicago have taken over the Calumet Elevator at South Chicago. This gives them a water outlet for their grain, the house having 350,000 bushels' capacity.

Moberly Bros. have completed extensive improvements in their grain elevator at Windsor, Ill. All the old machinery was replaced with new and the elevator is now modern throughout.

The large grain elevator at Wood and Twenty-Seventh streets, Chicago, which was destroyed by fire some time ago, will be rebuilt. Harris, Scotten & Co., the owners, will put up a strictly fire-proof structure to cost in the neighborhood of \$500,000.

The Harris-Scotten Co., Chicago, has taken a long term lease of the Iowa Elevator and is operating it in place of the Santa Fe Elevator which was burned September 9. A large quantity

of salvage grain from the latter is being dried and handled through the Iowa Elevator.

The Monica Elevator Co. has been organized at Monica, Ill., for the purpose of dealing in grain and will either buy or build a new grain elevator. The stockholders are M. C. Kelly, Wm. Walliker, Archie Smith, J. Leaverton, John Vogel and John O'Connor.

The Henry T. Truby Grain Co. is building a grain elevator at the new town of Andres, Ill., on the I. I. & M. Railroad. It will have a capacity of 40,000 bushels, and is expected to be ready to receive grain on November 1. Charles L. Truby will be manager of the house.

WESTERN.

Farmers are talking of building a grain elevator at Sprague, Wash.

M. J. White & Co. have sold out their grain business at Florence, Colo.

W. F. Kimball has sold his grain business at Weiser, Idaho, to E. E. Record.

H. H. Hindry & Co. has purchased the hay and grain business, owned by Oscar Thorne, at Pueblo, Colo.

The Bozeman Elevator Co.'s large grain elevator at Bozeman, Mont., is expected to be ready for operation by November 1.

The Kalispell Flour Mill Co. of Kalispell, Mont., expects to build a 75,000-bushel steel elevator at its plant early this winter.

Shaffer & Co., who are running the City Feed Store at Kent, Wash., are building a large grain warehouse preparatory to increasing their business.

The Western Grain and Warehouse Co. of Riverside, Wash., has been organized with a capital stock of \$20,000 by T. C. Dodge, C. E. Blackwell and C. M. Hicks.

The Spokane Flour Mills Co. of Spokane, Wash., has finished three large steel tanks, each 30 feet in diameter and 60 feet high. They have a combined capacity of 150,000 bushels.

The McDonald Elevator Co. has been incorporated to conduct a general grain, feed and milling business at Longmont, Colo. The capital stock is \$50,000 and the incorporators are Kenneth McDonald, Joseph Dalton and L. G. Munson.

The Benepe-Stanton Grain Co. of Bozeman, Mont., has been incorporated to take over the grain business of the Benepe-Owenhouse Co. The new corporation has a capital stock of \$60,000, all paid in. The directors are F. L. Benepe, B. T. Stanton and H. H. Benepe.

Alonza Wardal has organized a co-operative warehouse at Conlin City, Wash., with over two hundred stockholders. The company is a branch of the Farmers' Grain Supply Co. of Spokane, Wash., which owns and operates fifteen warehouses in eastern Washington.

EASTERN.

George B. Brown has completed an addition on his grain elevator at Ipswich, Mass.

Brit Hart will build a new grain elevator in place of the one built recently at Washington, Pa.

Toplin & Rowell have leased S. M. Farnum's building at Lyndon, Vt., and will use it as a grain store.

L. W. Johnson has sold out his grain business at Bristol, N. H., to Frank S. Kirk, who continues the business.

Gordon & Son have completed a number of improvements on their grain warehouse at Readfield Depot, Me.

W. N. Potter & Sons, wholesale grain and feed merchants of Greenfield, Mass., are building a new grain elevator.

J. W. Bicknell and G. B. Stanley have leased a building at Canton, Me., and will engage in the grain and flour business.

Bullock & Herrington, dealers in grain and feed at Hillsdale, N. Y., have completed a feed warehouse at their plant.

The Phillips-Thompson Grain Co. will build a four-story grain elevator at Wilmington, Pa., at an estimated cost of \$10,000.

The Belfast Grain Co. has been organized at Belfast, Me., to do a general grain business. Fred S. Jackson is manager of the business.

The new grain elevator which Sitley & Son are building at Camden, N. J., is expected to be ready soon to handle some of the new crop.

Burglars recently blew open the safe in the grain office of H. K. Foster at South Royalton, Vt. They secured about \$3,000 in money and checks.

The firm of W. E. Owen & Son, dealers in grain, flour and feed at Utica, N. Y., have been making extensive improvements in their grain elevator and warehouse and adding new machinery to facilitate the handling of grain. A new corn and feed mill will be installed.

The Stanley Grain Co. of Lawrence, Mass., is erecting a large grain and hay storage warehouse. The dimensions of the building are 100x46 feet.

The Somersworth Grain Co. has opened a grain warehouse at Somersworth, N. H. It is fitted with all modern machinery for handling grain and hay.

The Geo. Urban Milling Co. of Buffalo, N. Y., has filed plans for a 150,000-bushel steel storage tank to enlarge the storage capacity of the mill.

The grain store which has been operated at Bristol, N. H., by L. W. Johnson & Co. has been closed on account of the illness of one and death of another of the partners.

The Connecticut Valley Grain Co. of Boston, Mass., has been organized with a capital stock of \$125,000 by George M. Faulkner, Burton E. Noble and Fred E. Ewell.

Charles Hieber & Co., grain, feed and flour dealers of Philadelphia, Pa., are to erect a four-story grain and feed warehouse in that city. Its dimensions will be 64x56 feet.

The Phillips-Thompson Co. has placed its contract for a new grain elevator to be built on the north side of Fourth Street and east of Railroad Avenue at Wilmington, Del. It will be 40x84 feet in size.

Sanger H. Coburn, grain and feed dealer of Foxcroft, Me., has installed new elevating machinery in his grain warehouse at that place and put in a new gasoline engine to furnish power. The engine will also furnish power to run his feed mill.

The Waverly Sayre Co. of Waverly, N. Y., has been incorporated with a capital stock of \$30,000, to deal in grain and farm products. The incorporators are Cyrus F. Dyer, Waverly, N. Y., W. McCracken, Lewis A. and Sidney D. Conwell of Philadelphia, Pa.

Thomas Roberts has purchased the grain elevator and business of the Manchester Elevator Company at Manchester, Conn. The elevator has a capacity of 10,000 bushels and was erected about 20 years ago. Mr. Roberts did not buy the stocks of grain in the elevator and it will continue to be operated by Finnigan & Little.

SOUTHERN AND SOUTHWESTERN.

W. E. Lee has completed a new grain elevator at Ramona, I. T.

J. Gaiser has arranged to build a large corn mill at Isbell, Ala.

Scott & Lovell have succeeded Scott & Cole, grain dealers of Gage, Okla.

Heady & Coyle have succeeded W. H. Coyle, grain dealer of Guthrie, Okla.

Davis & Rosborough is a new firm to engage in the grain business at Marshall, Texas.

E. F. Spears & Sons, Paris, Ky., expect to build a steel or concrete elevator in the spring.

The Clift Grain & Elevator Co. of Hastings, Okla., will build a grain elevator at Marlow, I. T.

The Cunningham Commission Co. will build a grain elevator at Little Rock, Ark., at an estimated cost of \$8,000.

A report states that H. C. Thompson of White-water, Kan., will build a new grain elevator at Shawnee, Okla.

J. H. Williams of Corsicana, Texas, was recently looking for a site for a grain elevator in Pauls Valley, I. T.

Delbel Bros., recently of St. Louis, Mo., have engaged in the grain, hay and flour commission business at Little Rock, Ark.

R. M. Glazier and T. H. Bond have secured a large grain warehouse and are buying grain in connection with other interests at Manatee, Fla.

For some time the question has been agitated for a new grain elevator for Birmingham, Ala., and indications are now that a new house will be built in that city.

The J. B. Edgar Grain Co. of Shelby County, Tenn., was organized recently with a capital stock of \$10,000. The incorporators are T. B. Jones, V. I. Rogers, A. D. Taylor, J. B. Edgar and Thomas M. Scruggs.

The Nashville Grain and Elevator Co. of Nashville, Okla., has been incorporated with a capital stock of \$6,000 by O. W. Childs, W. C. Eddy, James Douglas, P. M. Combs, J. J. Gibson, Charles D. Jackson, F. E. Barr and Ira Swinehart.

The Patton-Hartfield Co. of Memphis, Tenn., has awarded to Fred Friedline of Chicago, Ill., the contract for its new grain elevator at 157 Maple Street, Memphis. It will be of concrete and iron construction.

A large corn handling plant is being built on the bank of the Tennessee River, between the river and the L. & N. Railroad at East Florence, Ala. The company is capitalized at \$15,000, with the following officers: D. J. M. Pierson, president and

manager; H. F. Alexander, Columbia, Tenn., vice-president; John W. Fry, Columbia, treasurer; John T. Ashcraft, secretary.

Donohue Brothers have purchased the grain elevator at Mulhall, Okla., which they have been operating under a lease from the owners. They will repair the house and install new machinery equipment where needed.

A meeting of the stockholders of the Covington Grocery and Grain Co. of Covington, La., was held recently, at which E. P. Singletary was added to the board of directors; E. J. Domerque was elected president and general manager, and W. A. Hood was elected vice-president.

The Webster-Locks Milling Co. has about completed arrangements to build a corn mill and warehouse at Mt. Pleasant, Tenn. The building will be 30x75 feet, with a capacity of 1,000 barrels of corn and six carloads of flour. There will be machinery for shucking and shelling corn with a capacity of 150 bushels an hour. A feed mill will be also included as a part of the machinery equipment.

THE DAKOTAS.

A grain elevator is being built at White Rock, S. D.

A new grain elevator is completed at Glen Ullin, N. D.

The new grain elevator at Carburry, N. D., is completed.

Dudley Scheffer is buying grain on track at Lebanon, S. D.

A farmers' elevator has been completed at Petersburg, N. D.

A new grain elevator has been contracted for at Strasburg, N. D.

Operations have begun on a new grain elevator at Flaxton, N. D.

Work has commenced on a new grain elevator at Broheyton, N. D.

A new 20,000-bushel grain elevator is being built at McKenzie, N. D.

The M. & W. grain elevator at Buxton, N. D., is ready for business.

The new grain elevator at Irene, N. D., was finished early in October.

A new 27,000-bushel grain elevator is just completed at Langford, S. D.

The Victoria Elevator at Pembina, N. D., is open, with S. G. Hoff, manager.

A grain elevator is being built at Fabian, three miles east of Alice, N. D.

Pierce & Porteous have put a feed mill in their elevator at Mitchell, S. D.

Hedde, N. D., has an elevator under construction and two more will be built.

The Victoria Elevator Co. is building a new grain elevator at McKenzie, N. D.

A farmers' elevator is being built at Russell, N. D., ahead of the railroad.

Elliott & Robinson have about completed a new grain elevator at Gronna, N. D.

The material is on the ground for a 30,000-bushel grain elevator at Des Loes, N. D.

A. L. Foster has sold his grain interests at Landa, N. D., to Arnold Bros. of Berwick.

The Ireys Elevator at Tolley, N. D., was ready to receive grain the last of September.

P. M. Cole is building a new grain elevator just west of his store at Kenmare, N. D.

F. F. Heitzman has secured a site for a new grain elevator at McClusky, N. D.

A new elevator is being built at Verona, N. D., by the Schmid & Anderson Grain Co.

The Powers Elevator Co. will build a new grain elevator at Edgely, N. D., in the spring.

An addition is being built on the grain elevator of the Farmers' Elevator Co. at Maza, N. D.

The contract has been let for a large grain elevator at the new town of Turtle Lake, N. D.

The Dakota Elevator Co. is building a 25,000-bushel annex on its elevator at Buffalo, N. D.

The newly organized Farmers' Elevator Co. at Neche, N. D., will build a new grain elevator.

The elevator at Dawson, N. D., has passed under the control of the Powers Elevator Company.

Work was commenced the last part of September on a new grain elevator at Hebron, N. D.

The new farmers' elevator at Michigan City, N. D., is opened with Olnier Knudson in charge.

Charlie Calkins is building a feed mill in connection with his grain elevator at Deering, N. D.

The Goozee Elevator at Norwich, N. D., has been opened for business with Mr. Ramsted in charge.

The new McCabe grain elevator at Upham, N. D., was opened the first part of October.

The new Minneapolis & Northern elevator at Milton, N. D., commenced receiving grain the last

of September. Aug. Peterson has been re-engaged as buyer.

The Thorpe Elevator Co. completed in September a new grain elevator at Deasam, N. D.

Stanley, N. D., will have a new 30,000-bushel grain elevator, built by the Imperial Elevator Co.

T. A. Brann, recently of the Canadian Northwest, is building a new grain elevator at Derrick, N. D.

Ohmstead, N. D., now has a railroad, and grain elevators are being completed to handle the grain.

The Imperial Elevator Co. has established a rye market at Granville, N. D. J. M. Wagner is buyer.

D. P. Muller has finished making extensive repairs on the Great Western Elevator at Kellogg, N. D.

George Gaines' new grain elevator at Jamestown, N. D., commenced receiving grain the last part of September.

John Taylor is building a grain elevator at Armstrong, a new station between Omeme and Willow City, N. D.

The Farmers' Elevator Co. of Milo, N. D., has been incorporated, capital \$10,000, by Alvin Martin and others.

An elevator of 25,000 bushels' capacity is to be built on the large Jean Du Luth farm near Duluth, Minn.

Early in October the Farmers' Elevator Co. commenced buying grain at a new elevator in Minnewaukon, N. D.

The Exchange Elevator Co. of Minneapolis, Minn., has commenced the erection of a new grain elevator at Linton, N. D.

The new elevator built by the Great Western Elevator Co. at Mandan, N. D., was completed early in October.

A receiver has been appointed to take charge of the affairs of the Farmers' Elevator Co. of Spiritwood, N. D.

The new Hawkeye and Atlas Elevators at Yankton, S. D., are expected to be ready for business early in November.

H. S. Belgum, cashier of the Farmers' Bank of Ray, N. D., is building a new grain elevator and will buy grain there.

The St. Anthony & Dakota Elevator at St. Thomas, N. D., was completed in September. Capacity, 20,000 bushels.

A new 25,000-bushel grain elevator is completed at Bloom, near Jamestown, N. D. M. Blewett is manager of the house.

The Hilmen Mercantile Company has bought a site for an elevator at Niles, N. D., which will be built at a future date.

The Simondson Elevator Co. of Minneapolis, Minn., has commenced work on a 20,000-bushel elevator at Driscoll, N. D.

The Farmers' Elevator Company has bought the Amenia Elevator at West Hope, N. D., and installed A. J. Helgeson as buyer.

The Monarch Elevator Co. is building a grain elevator as an addition to the old storage warehouse at Montpelier, N. D.

J. G. Stewart has made arrangements to build a new grain elevator at Nekomo, N. D., and will operate there as an independent buyer.

The Farmers' Mill Co. has bought the St. Anthony and Dakota elevators at Devils Lake, N. D., and is moving one of the houses to the mill.

One of the new grain elevators which the Imperial Elevator Co. is building in the Northwest is going up at Dunseith, N. D.

The McCaull-Webster Grain Co. of Minneapolis, Minn., has overhauled its house at Waverly, S. D., and put everything in first-class shape.

The Farmers' Elevator Co. of Granville, N. D., has been incorporated with a capital stock of \$10,000, by A. C. Richards and others.

Walton & Davis are completing a new grain elevator at Dickinson, N. D., giving two elevators to that city. Its capacity is 27,000 bushels.

The Duluth Elevator at Grafton, N. D., has been extensively repaired and a new 10-horsepower gasoline engine now furnishes the power to run it.

Wm. Engelbrecht, a business man of Lansford, N. D., is buying grain on track at Max Boss, N. D., and expects later to build a grain elevator there.

The Dakota Elevator Co. has completed a 25,000-bushel annex on its grain elevator at Alice, N. D. The capacity of the elevator is now 50,000 bushels.

The Amenia Elevator Co. of Amenia, N. D., will hold a meeting on November 10 to consider increasing the capital stock of the corporation to \$200,000.

J. B. Boyd commenced work the last part of September on a new 15,000-bushel grain elevator at Langdon, N. D. A gasoline engine will furnish power.

The foundation was started the last of September for a large grain elevator at Crary, N. D. Its owners are the Minnesota and Western Grain Co. There are now five grain elevators in that city.

Frank H. Keeler commenced buying grain at the new elevator at Buchanan, N. D., in October.

Articles of incorporation have been filed by the Knose Farmers' Elevator Co. of Knose, N. D., with a capital stock of \$16,000. Incorporators are H. L. Hock and others.

A Farmers' Elevator Co. has been incorporated at Fero, N. D. Capital stock \$10,000. The incorporators are Ole Paulson, John Rattle and W. D. McClintock of Rugby, N. D.

A. A. Truax of Mitchell, S. D., and the South Dakota Grain Co. of Parkston will build elevators at the new towns of Corsica and Stickney, S. D. There will be five new elevators in each town.

The Flora Elevator Co. is a new organization at Flora, N. D. Capital stock is \$10,000 and stockholders are Oscar Roppe, Peter O'Hara, J. H. Hoinden, N. E. Gullerud and Paul J. Moen.

The Powers Elevator Co. has completed a modern elevator of large capacity at Alfred, N. D. The company will also operate a lumber yard in connection with its grain business in that city.

Koenig & Co. have the framework completed on a new grain elevator at Garrison, N. D. The company has its scales in place and is buying grain, with J. A. Reuter in charge of the business.

IOWA.

Work is going forward on a new grain elevator at Barnum, Iowa.

Two new grain elevators are under process of construction at Gilbert, Iowa.

Tom Adams has bought John Lorew's grain and feed business at Wellman, Iowa.

W. H. Harbor has succeeded C. E. Irwin & Co., grain dealers of Henderson, Iowa.

Geo. McGillivray and A. J. Klinwort will build a new grain elevator at Carpenter, Iowa.

R. A. Smith has sold his grain elevator at Traer, Iowa, to Thomas A. Smith of Winnebago.

N. O. Dressman has succeeded Slaba & Dressman, grain dealers at Buffalo Center, Iowa.

The Agnew Grain Co. has bought the grain elevator of Bellmer & Watts at Oelwein, Iowa.

The Northern Grain Co. is building a new engine house at its elevator at Sac City, Iowa.

A new 15,000-bushel grain elevator has been completed by the Walnut Milling Co. of Walnut, Iowa.

The Farmers' Cereal Company has secured a site and will build a new grain elevator at Sloan, Iowa.

C. T. Litkins has sold his business at Bradgate, Iowa, and is in charge of DeWolf & Wells' elevator at Ruthven.

It is reported that the Rock Island Railroad will build a small transfer elevator at Council Bluffs, Iowa.

Geo. Lindroth has opened the elevator of Gilchrist & Co. at Luana, Iowa, and is buying grain at that point.

The Farmers' Elevator Co. of Rake, Iowa, has rented the Livermore Elevator and placed Ben Quamme in charge.

J. L. Gwynn of Imogene, Iowa, is again owner of the grain elevator business he recently sold to W. H. McCargill.

The Farmers' Elevator Co. of Roelyn, Ia., has been incorporated with a capital stock of \$5,000. Emmet Kelly and others are incorporators.

L. B. Spracher has purchased the elevator at Lake Park, Iowa, and has moved to that point from Sibley, where he has had charge of the Brown Elevator.

The Iowa Central Elevator at Eldora, Iowa, has been bought by the J. F. Donovan Elevator Co. of Warren, Ill., who has placed A. S. Howell in charge of the house.

M. Kerns, a grain and stock buyer of Charles City, Iowa, is building a grain elevator at Irma, a new station on the Illinois Central Railroad between Waverly and Plainfield.

E. D. Hamlin, of the Marshall Elevator Co., operating elevators along the Iowa Central and Northwestern railroads has concluded a lease of five houses in the southern part of Iowa, including stations at Hedrick, Martinsburg and Collins.

The Grain Growers' Incorporated Co-operative Association of Melvin, Iowa, has purchased George A. Romey's grain elevator at that place. The company which had been arranging for a site for a new grain elevator will not build. Henry Kuester will manage the elevator.

Droge Brothers, wholesale grain, flour and feed dealers, have arranged to build a new 50,000-bushel grain elevator at Council Bluffs, Iowa. The location will be on Ninth Avenue extending to Eleventh Street on property and trackage owned by the Great Western Railway. The building will be 30x40 feet and will have a sidetrack sufficient for 40 cars. The daily handling capacity

will be 50 cars of grain. The elevator will be equipped with modern machinery and will be completed by January 1.

The Jordan Elevator at Bancroft, Iowa, is being repaired by the Plymouth Elevator Co., which recently bought it. As soon as the alterations are completed they will commence buying grain.

The Trans-Mississippi Grain Co. of Omaha, Neb., has completed arrangements to replace its old Union Elevator at Council Bluffs, Iowa, with a new house. The new elevator will be of 600,000 bushels' capacity and will be equipped to handle 80 to 100 cars a day, in and out. Electricity will furnish power. The Barnett & Record Co. furnished the plans and will superintend the construction.

MINNESOTA AND WISCONSIN.

A new grain elevator will be built at Cable, Wis., by Parent & Rogan.

Gilbert Carlson is buying wheat at his new elevator at Dawson, Minn.

T. B. C. Evans has completed his new grain elevator at Hawley, Minn.

Caw & Lynch, grain dealers of Chatfield, Minn., have dissolved partnership.

A grain elevator is one of the new business institutions for Garfield, Wis.

The Hanson Supply Co. has completed a new grain elevator at Hansen, Wis.

The Wisconsin Elevator Co. has enlarged its grain elevator at River Falls, Wis.

The New London Milling Co. has contracted for a new grain elevator at Raymond, Minn.

The Interstate Grain Co. is contemplating building a new grain elevator at Nevis, Minn.

The grain elevator at Otisville, Minn., has been removed to Maple Grove, on the Soo Line.

C. E. Gillen has bought the elevator at Fountain, Wis., of the S. Y. Hyde Elevator Company.

Will Zimmerman has leased the grain elevator of George Bartholomew at Fennimore, Wis.

John and Chas. Perrizo have succeeded Perrizo & Perrizo, grain dealers of Delavan, Minn.

The Plymouth Elevator Co. of Sioux Falls has purchased an elevator site at Magnolia, Minn.

The new Hill Elevator at Clinton, Minn., was ready to receive grain the last part of September.

The Willmar Milling Co. of Willmar, Minn., is arranging to build a new grain elevator at its plant.

The Guthrie Elevator at Austin, Minn., was opened in September with James D. Smith as buyer.

E. Enke will run a feed mill this winter at Richdale, Minn., in connection with his grain elevator.

Sherwood & Warren have bought the grain elevator, store, etc., of Hart & Co. at Valley Junction, Wis.

The Miller Elevator Co. has installed a 5-horsepower gasoline engine in its elevator at Hayfield, Minn.

A new elevator is about completed at Round Prairie, Minn. A gasoline engine will furnish power.

The Nels Enge Grain Co. of Minneapolis, Minn., has been incorporated, with a capital stock of \$50,000.

The E. A. Brun Elevator at Pipestone, Minn., has been opened for the season with H. S. Sunderland in charge.

The Farmers' Co-operative Association is building an addition on its grain elevator at Lake Benton, Minn.

A farmers' elevator has been opened at Wanamingo, Minn., with Charles Rae, formerly of Elendale, as manager.

The Merchants' Association of Little Falls, Minn., has leased a grain elevator at that place and is buying grain.

W. Hulburt has leased the Russell Elevator at Stephen, Minn., for one year, and has put James Potter in charge of it.

J. J. Christy has taken charge of the Reinke Grain Elevator at Westbrook, Minn., which he purchased last spring.

The Milroy Farmers' Elevator Co. has completed a new grain elevator at Milroy, Minn., and is buying grain at that point.

The grain elevator at Glenwood, Wis., owned by the Northern Grain Co., has been reopened with J. W. Harmor in charge.

The Merrilman Milling & Produce Co. of Merrilman, Wis., has opened an elevator at that place and is buying grain and produce.

Lincoln Wasson has bought an interest in the Elliott Elevator Co. at River Falls, Wis., and the firm is now Elliott & Wasson.

The S. Y. Hyde Elevator Co. of La Crosse, Wis., which some time ago announced that it would go out of business, has filed a notice of dissolution, but the firm will probably continue in business for

still runs elevators on the Farmington line between Mankato and St. Paul and houses at Peterson, Mapleton and Sherburne, Minn.

The W. W. Cargill Elevator Company of La Crosse, Wis., has leased the Palmer Elevator at Palmer, Minn., and has opened it for business.

The Milwaukee & St. Paul Elevator at Portage, Wis., was opened the last of September with Harry Bryan and Samuel Townley in charge.

The Merchants' Association has leased the Gravel Elevator on the East Side tracks near Broadway, at Little Falls, Minn., and will buy grain at that point.

The new grain elevator of Quinn Bros. at Litchfield, Minn., commenced receiving grain in September. A Fairbanks gasoline engine furnishes the power.

The W. W. Cargill Elevator Company's grain elevator at Fond du Lac, Wis., was opened for business in September after being closed for over a month.

The New London Milling Co. of New London, Minn., has bought the Eastlund and Ohman warehouses at Ogilvie, Minn., and will buy grain at both houses.

Henry Rippe of Fairmont, Minn., has transferred to the Rippe Grain & Milling Co. the Fairmont & Ceylon Mills and the Fairmont Elevator and Warehouse property.

The Mutual Elevator Co. has installed a new 8-horsepower gasoline engine in its grain elevator at Taunton, Minn., and later will put in a cleaner and corn sheller.

The Monarch Elevator at Little Falls, Minn., which has been leased by the Farmers' Exchange, was placed in operation in September with Julius Neumann in charge.

The new grain elevator of Lytle & Stoppenbach at Jefferson Junction, Wis., was expected to be finished about the middle of October. Fred Gotenrath was the architect and builder.

Frank Peterson has sold his grain elevators at Hutchinson, Minn., and nearby points and has removed to the western part of the state, where he is also interested in the grain business.

The McCaull-Webster Grain Co. of Minneapolis, Minn., has secured sites and will construct seven elevators at points along the new Great Northern extension from Ashland, Neb., to Sioux City.

Wm. Byman, who has had charge of the Interstate Elevator at Eagle Bend, Minn., for the past three years, has leased the Farmers' Elevator at that point and is buying on his own account.

The Farmers' Elevator & Milling Co. has been organized at Granite Falls, Minn., with J. J. Mooney, president, and C. E. McGregor, secretary. They will at once build a new grain elevator.

An extension is being built by the Great Northern Railroad from Ellendale, N. D., fifteen miles southwest, and at the town of Forbes at the terminus of the road a new grain elevator will be built.

Cargill & Diemer have bought the Winter & Ames Elevator at Bagley, Minn. They have installed some new machinery, including a gasoline engine and a large-sized scouter and cleaner.

The Farmers' Elevator at Long Prairie, Minn., opened for business on October 2. It is fitted with J. L. Owens Co. Separator and Grain Cleaner and is operated by a gasoline engine. The capacity of the elevator is 25,000 bushels.

The Seyk Co. of Kewaunee, Wis., which has been buying grain at Forrestville, Wis., for several years, has withdrawn its buyer at that place and will confine its operations to Algoma and Kewaunee.

The Farmers' Elevator Co. of Bertha, Minn., has let the contract for an addition to its elevator. The new building will be 22x40 feet, and will be principally used for the storage of flour and feed.

A co-operative grain company has been organized at Lowry, Minn., and has purchased the Woodworth Elevator Company's grain elevator at that place. Ed Hollen has been employed as manager of the house.

S. Stewart has bought the site of the Interstate Elevator at Morris, Minn., of the owners, Messrs. Snyder & Riniker. The elevator burned a short time ago. It is not known to what use the new owner will put the site.

The J. P. Button Elevator Co. of Sheldon, Iowa, has bought the grain elevator at Bigelow, Minn., owned by the Anchor Grain Co. They will make some improvements in the house and install gas engine power instead of steam.

Plans were under way in September to organize an independent elevator company at Superior, Wis., to build a 500,000-bushel working elevator. It was thought the erection of such an elevator would settle the grain fight in favor of Wisconsin inspection.

The improvements in the Grand Republic Elevator at Superior, Wis., were completed in September. An addition was built on the house and it now has dimensions of 145x50 feet and 138 feet high, with new machinery throughout, including a

300-horsepower steam engine. It has a working capacity of 200,000 bushels, with storage room for a number of bushels in excess of that amount.

The Farmers' Elevator Co. of Wanamingo, Minn., has filed articles of incorporation, with a capital stock of \$10,000. The first board of directors is L. J. Gjemse, Herman Naeseth, J. A. Norstad, H. M. Halvorsen, O. S. Haugen, Alfred Steberg and A. H. Tougen.

CANADIAN.

A farmers' elevator has been completed at Abernethy, Sask.

A new grain elevator is desired by the business men of Midale, Sask.

A new grain elevator is being built at Fort Saskatchewan, N. W. T.

A new elevator will be built at Grand View, Man., by the Brandon Milling Co.

The Western Milling Co. is to build a 20,000-bushel grain elevator at Macleod, Alta.

Arrangements are under way for the construction of a new elevator at Millet, Alberta.

A. Kelly & Co. have purchased a site and will build a new grain elevator at Ashville, Man.

A new grain and flour warehouse is being built at Warman, Sask., by the Union Supply Co.

The Northern Elevator Co. has opened new elevators at Creelman and Rossburn, Sask.

The Alberta Pacific Elevator Co. has purchased and will operate the elevator at Carstairs, Alberta.

A new grain elevator has been completed at Sedley, Sask., by the Lake of the Woods Milling Co.

McCaskill Brothers of Rosehill, Man., have built a grain elevator at Ladysmith siding west of Rosehill.

J. E. and E. C. Hall have completed arrangements to build a large grain elevator at Vancouver, B. C.

The Brackman-Ker Milling Co. of Victoria, B. C., has completed an 85,000-bushel grain storage tank at Strathcona, Alta.

Edmund Riley is making arrangements to rebuild the corn mill at St. John, N. B., which was burned about a year ago.

The Red Deer Flour Mill and Elevator Co. has been organized to build a large flour mill and grain elevator at Red Deer, Alta.

F. Foulson, owner of the general store at Riding Mountain, Man., is building a grain elevator and will buy grain at that place.

The grain elevator which the Western Milling Co. is building at Calgary, N. W. T., is expected to be ready for operation in December. It will have a capacity of 70,000 bushels.

The Lake of the Woods Milling Co. has completed a grain elevator at Creelford, on the Brookdale extension of the Canadian Pacific Railroad, N. W. T.

A charter has been granted to P. Burns & Co. of Calgary, N. W. T., with a capital of \$2,000,000 to carry on a grain and elevator business and to deal in live stock.

L. Jones of Ninga, Man., is remodeling his flat warehouse into a grain elevator and will fit it with new machinery for the more convenient handling of grain.

The Alberta Grain Company has finished the erection of a 40,000-bushel grain elevator at Pincher Creek, Alta., and has one under construction at Edmonton.

The Alberta Pacific Elevator Co. began work in the middle of September on a 40,000-bushel grain elevator at Leduc, Alta. The company will buy grain there and also produce.

The Western Canadian Flour Mill Co. is operating this season the grain elevators at Starbuck, Elm Creek and Sperling, Man., which were formerly operated by the T. L. Metcalfe Co.

A number of improvements will be made on Elevator "D" at Fort William, Ont., and some new machinery will be added. The elevator is owned by the Canadian Pacific Railway.

In addition to the 500,000-bushel storage elevator which the Western Canada Flour Mill Co. will build at St. Boniface, Man., the company will build a line of elevators at country points.

It is rumored that the Canadian Pacific Railway may take the initiative in the proposal to ship wheat to the Orient from Vancouver by erecting an elevator there with a capacity of 1,000,000 bushels.

The Canada Lands Improvement Co., Toronto, Ont., has been incorporated with a capital stock of \$50,000 to do a grain and milling business, erect saw mills and to cultivate and improve lands. The provincial directors include R. A.

Grant, Alexander McKenzie and W. H. Templeton of Toronto.

The new grain elevator at Davidson, Sask., will be soon ready to receive grain.

It was reported that several thousand dollars belonging to grain firms, sent out from Winnipeg banks to pay farmers for grain, was stolen when Hamlin Bros.' store at Napinka, Man., was raided by burglars one night in October.

MISSOURI, KANSAS AND NEBRASKA.

The new Eames-Hays elevator at Alma, Neb., is completed.

Thorp & Bush, grain dealers of Nelson, Mo., have dissolved partnership.

A farmers' elevator was completed in September at Lebanon, Neb.

It is reported that a farmers' elevator will be built at Auburn, Neb.

The Niles Grain Co. has put a feed grinder in their elevator at Salina, Kan.

Lee Hill and C. H. Rundberg have bought C. H. Hart's elevator at Edgar, Neb.

A farmers' elevator company has laid out a site for an elevator at Pickrell, Neb.

G. A. Frerking has sold his grain and feed business at Corder, Mo., to A. J. Frerking.

James Trumble has purchased and is operating the Holland Elevator at Havelock, Neb.

The new Santa Fe grain elevator at Argentine, Kan., was completed the last of September.

The Blenkiron Grain Co. of Sioux City, Iowa, will build a new elevator at Randolph, Neb.

A new grain elevator has been built at Rushville, Neb., and is in charge of P. E. Haines.

The D. Dewey Grain Co. has been organized to engage in the grain business at Wichita, Kan.

The farmers about Avoca, Neb., are interesting themselves in a new grain elevator company.

The Farmers' Elevator Co. of Carroll, Neb., has been incorporated with a capital stock of \$10,000.

The Cloud County Grain Co. has about completed its new grain elevator at Concordia, Kan.

Newman & Welch have succeeded Weaver & Newman, grain and feed dealers of Columbus, Neb.

The grain elevator and mill of Garrell Brothers at Gregory, Mo., is being removed to Bluff Springs, Mo.

Plans were under way in September for the erection of a new farmers' elevator at Elm Creek, Neb.

Wells-Hord Grain Co. has installed an improved Hall Grain Distributor in their elevator at Benton, Neb.

A farmers' elevator with capacity of 25,000 bushels is in process of construction at Gothenburg, Neb.

The Elgin Elevator Co. is installing two improved Hall Grain Distributors in its elevator at Elgin, Neb.

The Updike Grain Co. has equipped its elevator at Creighton, Neb., with an improved Hall Grain Distributor.

The farmers' elevator which burned last spring at Vesper, Kan., has been rebuilt with a capacity of 20,000 bushels.

The Farmers' Independent Shipping Association of Wilsonville, Neb., has been incorporated by the farmers of Hitchcock County.

Joseph A. Connor has sold his grain elevator at Creston, Neb., and will go out of the grain and live stock business at that place.

The Westbrook-Gibson Grain Co. has placed its contract with D. H. Cramer for a 25,000-bushel grain elevator at Kearney, Neb.

The Smith Center Mill and Elevator Co. of Smith Center, Kan., is building a 50,000-bushel grain elevator in connection with its plant.

The Ewart-Wilkinson Grain Co. has commenced an addition to their grain elevator at Wahoo, Neb., that will bring the capacity to 30,000 bushels.

The old Westbrook-Gibbons elevator at Shelton, Neb., has been torn down and the material is being used to construct an elevator at another point.

Arnold & Scanlan have sold the elevator at Chapman, Kan., to the Carroll & Co. Milling Co., who are completing arrangements for a new mill.

The Sweetwater Elevator at Sweetwater, Neb., owned by Zbinden Bros., has been purchased by the Tidball Lumber Company of Ravenna for \$2,500.

The Russell Milling and Elevator Co. of Russell, Kan., has placed its contract for a new grain elevator and mill building. The elevator will have a capacity of 40,000 bushels.

Cooper & Linn, grain dealers of Humboldt, Neb., have added to their line of houses in southern Nebraska by the purchase of the elevators at Burchard and Armour of P. S. Heacock of Falls City. Cooper & Linn now operate elevators at

thirteen different points between Humboldt and St. Francis, Kan.

The McCann Grain Co. has removed from Lincoln, Neb., to Western, Neb.

The Greeley Live Stock and Grain Co. of Greeley, Neb., has filed articles of incorporation, with a capital stock of \$25,000. The incorporators are W. T. Auld and E. D. Gould.

The Farmers' Grain Co. has been organized at Callaway, Neb., with A. C. Griffith, president, and John Fredericks, secretary-treasurer. The company will build an elevator.

Norcross Bros. of Beatrice, Neb., have purchased the elevator and grain business of Blythe & Patron at Putnam. They will operate the elevator in connection with their grain business in Beatrice.

The 1,000,000-bushel grain elevator at Omaha, Neb., commenced operations the first part of October. E. S. Carris is superintendent of the elevator, and S. D. Parkhurst, general manager.

Kimpler & Kauzer, proprietors of the Ellinwood Mill and Elevator at Ellinwood, Kan., have dissolved partnership and the business will be continued by Mr. Kimpler, who purchased his partner's interest.

The Farmers' Co-operative Grain Association completed a large grain elevator at Arapahoe, Neb., early in October. It is fitted throughout with modern machinery and is up to date in every particular.

Bosemeyer Bros. of Superior, Neb., will build a new grain elevator at Webber, Neb., if a site is secured. There are two elevators at Webber, but it is contended that the number is not sufficient to handle the grain there.

There are a number of excellent sites for grain elevators on the new 107-mile branch of the Great Northern road from Ashland, Neb., to Sioux City. A number of good towns are on the line and sites have already been secured for new houses.

OHIO, INDIANA AND MICHIGAN.

A new grain elevator will be built at Berkshire, Mich.

W. O. Rearick has sold his grain business at Van Wert, Ohio.

L. E. Daniels has succeeded L. E. Daniels & Co., grain dealers of Kewanna, Ind.

E. H. Schlupp, grain dealer of Van Wert, Ohio, has filed a petition in bankruptcy.

J. Frutcheys's grain elevator at Deford, Mich., commenced operations in October.

J. L. Storms has purchased a site for a new grain elevator at Clarks Hill, Ind.

It is reported that Hankins Bros. have purchased the grain elevator at Owosso, Mich.

H. O. Barnhouse has succeeded Barnhouse Brothers, grain dealers, of Raymond, Ohio.

M. Eversole, formerly of Berne Station, Ohio, has engaged in the grain business at Bremen, Ohio.

J. George Eckert has retired from the grain and feed firm of Eckert Brothers of Conneaut, Ohio.

George Redpath and Claude McMillen have purchased the grain elevator and feed mill at Martin, Mich.

A company has been organized to build a new grain elevator and flour mill at Traverse City, Mich.

Caughey & Carran of Detroit, Mich., are making changes in their grain elevator to double the capacity.

The Central Elevator Co. of Cleveland, Ohio, has increased its capital stock from \$5,000 to \$500,000.

Aaron Dunkel has purchased a half interest in the Brooks Elevator at Enon, Ohio, and has taken charge of it.

The Toledo Grain and Milling Co. of Toledo, Ohio, has increased its capital stock from \$30,000 to \$150,000.

A. F. and H. B. Gray, owners of the Crawfordsville Coal and Grain Co. at Crawfordsville, Ind., have sold out.

A new grain elevator will be built at West Branch, Mich., by the Saginaw Milling Co. of Saginaw, Mich.

W. E. Briggs has succeeded William Briggs & Son in the ownership of the grain elevator at Shelbyville, Mich.

The West Side Iron Elevator at Toledo, Ohio, which has been closed since last March, started up the last part of September.

The Fremont Elevator Co. has sold the elevator at Eslin, Ohio, to Wolfe & Jones, who own and operate the elevator at Vickery, Ohio.

The Crabbs-Reynolds-Taylor Grain Co. of Crawfordsville, Ind., has bought the grain elevators owned by Bittle Brothers at Wingate and Linden,

Ind., for \$30,000. The company now owns eighteen elevators in western Indiana.

Johnston Brothers have bought of D. C. Miller the site of the grain elevator recently burned at Oxford, Ohio, and will rebuild the house.

George E. Grant is buying grain at Cygnet, Ohio, and has converted a large building formerly used as an ice house into a grain storage warehouse.

The Schulenberg Elevator at Covington, Ind., has been bought by Tom Bodine, who will run it in connection with his other elevator at that place.

The Metzger-Hill Co. has transferred its lease in the grain elevator on Hopkins Street and President Place, Cincinnati, Ohio, to the Southern Grain Co. of that city.

J. W. Brumett and A. R. Hardesty are doing a scoop-shovel business in grain at Valparaiso, Ind. They have no elevators but are buying grain on bids from Michigan receivers.

The Western Grain Products Co. has completed the new plant at Hammond, Ind., which burned several months ago. The business is principally the manufacture of horse and dairy feeds.

The new grain elevator built in connection with the Canton Feed Store at Canton, Ohio, will be completed in October. The building will be three stories high, of brick and 150x60 feet.

Albert H. Buehele has succeeded to the grain, feed and seed business of his father, John Buehele, at Youngstown, Ohio. Mr. Buehele established the business over forty years ago.

BUFFALO RAILROADS' WAY.

"Why are so many elevators in Buffalo idle? Ten years ago upward of 250,000,000 bushels of grain were handled by the elevators in this harbor, while now the business has dropped to the neighborhood of 100,000,000 bushels. Furthermore, in the good old times there were always plenty of cars, while now, with the greatly decreased receipts, it is difficult for the railroads to supply cars in which to forward the grain, even with their facilities increased 100 per cent.

"In the old days the canal got a good portion of the grain, although always a small factor in the carrying. To-day, three or four of the large elevators in Buffalo harbor could easily handle all the grain that is transferred here. Of course, within two or three weeks the elevators will be filled with storage grain, but canal navigation will soon be closed for the winter, and consequently the canal will get but little of this storage grain. If the Western Elevating Association would go into the forwarding business it might prove a strong competitor of the railroads, and a large portion of the grain could go to New York directly it arrived here, thus avoiding the usual congestion. As it is now, the railroads are sure to receive the grain and just as sure to forward it East, at their own pleasure.

"It seems a pity," said a Buffalo grain dealer to a News reporter, "to see these immense elevator properties idle the greater portion of the year, when they have every facility for handling grain with the greatest dispatch and economy. One-half a cent per bushel is the extremely low rate which the elevators charge for handling grain, and this barely pays fair interest on the great sums of money invested. If the forwarder ships by boat from the West to Buffalo, and thence by either rail or canal, he is subjected to heavy lighterage charges in New York harbor for the transfer of his grain to ocean steamers, for the most of these lighters are either owned or controlled by railways or railway officials. They can afford to handle a much smaller tonnage at the high rate than to handle a large tonnage at a reasonable rate. There is more money in it for them this way. The direct rail route through from the West to New York includes the lighterage charge, which is the inducement for shipper to forward that way.

"Again, a good deal of grain is now going by way of Montreal. For some reason or other little significance is attached to this or to the action of the Canadian government in constructing immense elevators at Port Colborne. At this point they are dredging out the harbor for vessels of 13 or 14 feet draft, and the calculation is to receive and elevate the grain there, reloading it into vessels of 60,000 to 80,000 bushels' capacity for reshipment to Montreal, where it will be again elevated and loaded into foreign vessels. For these two elevations only one charge will be made, and, therefore, large shipments of grain, it is believed, will go this route. It is thought that an independent organization could accomplish much to improve the situation."

The bean crop in some parts of Western New York is said to have been affected by rust.

THE EXCHANGES

James Carruthers, a well-known cash grain man of Montreal, has been voted into membership by the directors of the Chicago Board of Trade.

A membership on the Chicago Board of Trade was sold last week at \$3,075 net to buyer. This was \$75 above the previous sale, which was for two memberships at \$3,000 net to the buyer. The sale preceding this was for \$2,975 net to the buyer.

By unanimous vote the Minneapolis Chamber of Commerce on October 5 elected P. B. Smith as its president. This is a recognition of Mr. Smith's services, which have had much to do with the favorable development of the Exchange. He has been a director and vice-president of the Chamber of Commerce for several years, and is the general manager of the St. Anthony Elevator and the Dakota Elevator at Minneapolis.

The smoking room of the Chicago Board of Trade has been opened to traders in "bids" and "offers." The doors of the room were officered and members of the Board only were admitted. Orders are filled from Minneapolis, Milwaukee and other points which heretofore have drawn trade from Chicago. Most of the principal wire houses are now represented in trades on the new style of contract. The smoking room is thrown open to traders in bids and offers from 1:30 to 2:30 p. m. each day.

The thirteenth annual meeting of the Chicago Board of Trade Mutual Benefit Association was held last month. Four hundred and twenty thousand dollars has been paid out since the organization was completed in 1892. Since that time the average amount paid to each beneficiary was \$2,796.40, and the average number of assessments was 11.58 per year. J. W. Fernald, Geo. W. Stone, C. L. Dougherty, Frank Marshall and J. W. Broughton were re-elected as members of the executive committee.

The Chicago Board of Trade has been asked to again become identified with the National Board of Trade. W. T. Anderson, the commissioner of that body, met with the directors of the Chicago Board on October 10, and reviewed the advantages of annual trade conventions and of representation in Washington when legislation of a commercial character is under consideration. No definite action has yet been taken. The Chicago Board of Trade withdrew from the national body two years ago.

The Superior, Wis., Board of Trade has elected directors to fill the unexpired terms of those directors who last month resigned to transfer their interests to Duluth, Minn. New directors are: Charles A. Erhart, M. C. Wright, A. N. Lent and T. J. Solon. The Superior reports say that all of the directors who resigned except Byron Kimball were granted seats on the Duluth Exchange on the condition that they have nothing to do with the Superior grain interests. Mr. Kimball was appointed chief weighmaster under the Wisconsin inspection law.

100-POUND DOCKAGE RULE.

A petition was circulated about a fortnight ago on the Kansas City Board of Trade asking the repeal of the rule authorizing the reduction of 100 pounds a car from the official weight on grain. The rule was adopted April 22, 1905, and reads:

"On all grain bought by members of the Kansas City Board of Trade, and on which Kansas City unloading weights are given, an allowance of 100 pounds a car shall be made to the buyer to cover loss on account of dirt and other foreign matter."

No action has been taken on the petition, however, by the Board or its officers.

NEW RULES AT WINNIPEG.

The Winnipeg Grain Exchange has amended Section 8 of By-law 9 of the Rules and Regulations of the Exchange to read as follows:

Section 8.—The council shall have power and authority to fix the contract grades of grain that shall govern all trades made on the floor of the Exchange during the established hours of trading.

The council when fixing the contract grades of grain may allow on the delivery of contracts any grade having a value carrying a premium or discount over or under the value of the contract grade and may also fix the amount of the premium or discounts to be allowed thereon.

The council may from time to time cancel or alter (either or both) the grades so deliverable or the premiums or discounts so fixed, on giving thirty days' notice by posting on the bulletin board of the Exchange, notice of its intention to do so; but all contracts made previously to such cancellation

shall be governed by the grades, premiums or discounts in force at the time of making such contract.

By-law 17 was amended to read as follows:

Rule 12.—In a contract for future delivery the grades premiums on discounts fixed by the council under Section 8 of By-law 9 in force at the time of making such contract, shall govern.

COMMISSIONS AT CHICAGO.

The matter of amending the rules of the Chicago Board of Trade to increase the commissions allowed on option and cash business, and the proposition to put all employes on the exchange floor on a brokerage basis has been referred to a special committee composed of J. H. Ware, G. W. Patten, A. S. White, J. B. Adams, Robert Pringle, W. S. Warren and L. W. Bodman. There is but little opposition to the proposed increase, as it is the general feeling that commissions on trades now are much too small. In the aggregate a big concern may realize a good amount of money in the shape of commissions on trades, but considering the large amount of business it is necessary to handle and the attendant risks the amount realized is relatively very small.

Private wire houses oppose the proposition to put their employes on a brokerage basis, as the expense of conducting their business in a busy season would be much heavier than under the present arrangement. Employes oppose the plan for several reasons. Except when there is a good deal of business, it would not be possible for any of them to make enough to meet ordinary running expenses, and when trading is brisk, the older and better known employes of a given house would make most of the trades and hence shut out the younger traders who have considerable ability, but are not so well known. Eastern members of the Board favor the advance of commission charges.

The New York Produce Exchange held a meeting October 3 to consider the proposition to increase commissions to 1-16 cent a bushel on trades for members operating on the exchange, 1/8 cent a bushel on trades for non-resident members and 1/4 cent a bushel on trades for outsiders. The vote showed the members favored the advance, provided Minneapolis and Chicago decided in favor of an increase. The president of the exchange was authorized to appoint a committee of five members to confer with the members of other exchanges which have this same proposition under consideration.

In Minneapolis the opponents of the increase argue the higher rate would place the grain commission on the same basis with stocks and cotton and public speculation might be turned to stocks where market fluctuations are more pronounced. In grain the speculator deals with a proposition affected by supply and demand all over the world, while in stocks the speculation is more confined to a study of domestic conditions.

BIDS AND OFFERS AT CHICAGO.

The Patten committee on puts and calls on the Chicago Board of Trade reported to the commission houses interested in the matter on September 29. The report recommends the plan of an indemnity, or plan of insurance against loss, which was framed by W. S. Crosby, a member of the committee. The attorneys have found no flaws in the plan, and to put it into operation it would be necessary only to amend slightly the rules of the Board.

The form of trade is a "contract for indemnity," and when in operation memoranda will be passed through the clearing house under the same regulations which apply on contracts of purchase and sale, Section 18 of Rule 22 being amended to include such a change as follows:

"In consideration of the receipt of \$5 I hereby agree to indemnify Richard Roe and save him harmless from loss on the sale of 5,000 bushels of wheat for December delivery through an advance in the market to above the price of 85 cents per bushel. This contract terminates at the close of the exchange on the regular business session following the date hereof. Any and all claims for payment of indemnity hereunder must be made and established in the manner and in accordance with the rules and regulations of the exchange providing therefor and relating thereto. [Signed] John Doe."

An indemnity of purchase reads the same except for the substitution of "purchase" for "sale" in the first sentence.

Section 20 will read in part: "When the holder of a contract of indemnity of purchase desires to make a demand on account of said contract he shall so notify the maker of said contract at or before the close of the session on the day on which said contract terminates; also whether his demand extends to all the property covered by the contract, and, if part only, name such part, and sell it to the maker of such contract, and the maker buy it from him at the official closing price of the exchange on that date. Any loss between such closing price and the price named in the contract of indemnity shall be due and payable in full by the maker of the contract at once; provided, the

maker of said contract refuse to so buy from the holder such property, as provided, the holder shall during the first hour of the next session sell the same in the open market for account of whom it may concern," notify the maker of said contract of said sale, the price, and the parties to whom sold, and the loss shown shall then be due him from the maker at once."

An amendment providing for a brokerage of "not less than 5 per cent of the consideration or the premium paid or received, charged to non-members, and a brokerage of not less than 3 per cent to members," is provided for also.

NEW CONTRACT GRADE AT DULUTH.

The Duluth Board of Trade has adopted a rule making No. 1 Northern wheat a contract grade and permitting the delivery of No. 2 Northern on contracts at the seller's option at a penalty of 5 cents a bushel.

Beginning October 5, quotations sent out from Duluth have been for the new style contract grade only. Thus, after a five months' trial of No. 2 Northern as a contract grade of wheat Duluth is ready to go back to its former standard. The change last spring was made under the supposition that the influence on the market would be broadening and would prevent any possibility of a corner. The value of No. 2 Northern, unlike the grades recognized as contract in the principal markets, is dependent upon the value of No. 1 Northern, and the amount of the latter raised and turned out by the mixing houses as compared with the amount of No. 2 Northern produced. To figure all this out in order to arrive at some conclusion as to the value of No. 2 Northern every time a trade was made proved too much of a problem for the Duluth members, and a petition and the change to the former basis were the outcome.

The Duluth Commercial Record, in commenting on the change, says: "The object originally aimed at, viz., the elimination of corners, will be served fully as well and Duluth will be trading in a contract grade that won't require a statistician with every grade."

PROPOSED 80 PER CENT RULE.

The rules committee of the Chicago Board of Trade has up for consideration a proposition to give the seller of any cash property on the exchange the privilege of collecting 80 per cent of the value of the property sold on presentation of the bill of lading, pending the final adjustment of weights. A sub-committee consisting of J. J. Stream, E. A. Graft, William Nash and P. H. Schiffin has been appointed to consider what changes in the present plan are desired and outline a proposition which shall be acceptable to the buyers.

In lieu of this rule and as a matter of protection to commission houses who always have considerable capital tied up through waiting for cars to be transferred to team track or to an elevator, it is proposed that an indemnity bond be filed by the private transfer houses along the same general plan employed in the case of public warehouses.

The grain and feed trade of the city feel that the adoption of a rule requiring them to pay 80 per cent of the value of a purchase at the time of the sale would work injustice to them because they are often compelled to wait several weeks before they can get at a car to unload it. Were the rule in effect as at first proposed it would necessitate a very large capital to manage even a small business.

The commission men are to a certain extent in favor of the rule, but they do not want to be unfair to or unduly severe on the buyers. It is usual for the receiver to advance at least 80 per cent of the value of a consignment to the shipper. When the goods are sold they wait until the cars are delivered to the buyer before payment is made. Where grain is sold to go into an elevator, the delay is sometimes more than a month; and, they argue, in the meantime the buyer may go into the hands of the receiver without having paid for the goods. It is on this latter point that the commission men want more protection. The feed trade is considered first-class and the receivers are not much averse to waiting a week or two when the buyer is a local dealer and a member of the Chicago Feed Dealers' Association. The failure of an elevator concern recently, in which a number of commission men were caught, started the discussion, and a petition was presented to the directors, who referred it to the rules committee to frame a proposition satisfactory to all sides.

The present high duties will be increased by Germany March 1, next, and therefore that country is buying all grain freely in anticipation of the extra tax. Our foggy senators are too high-browed and stupid to permit a reciprocal treaty with our best customers.—Pope & Eckhardt Co., October 4.

COMMISSION

H. D. Roos, a wheat broker on the Chicago Board of Trade, is now with H. M. Smith & Co.

J. A. Edwards, of J. A. Edwards & Co., Chicago, has returned from a two months' vacation in Europe.

The cash grain department of the Geo. H. Daggett Company, Chicago, is now under the management of Frank W. Hotchkiss.

Creditors of Andrew Bender of Cincinnati, Ohio, have made a proposition to accept 50 cents on the dollar in settlement of their claims.

F. E. Ash of Lisbon, N. D., has taken a position as traveling solicitor for the grain commission firm of McCarthy Bros., Minneapolis, Minn.

Thos. Corwin, formerly associated with Southworth & Co. of Toledo, Ohio, is now with the American Hominy Co. of Indianapolis, Ind.

A proposition to settle at a basis of 25 cents on the dollar has been made to creditors by the Calumet and Western Grain and Elevator Co., Chicago.

J. R. Marfield, of the Marfield-Griffiths Co. of Minneapolis, Minn., has been making an extended visit to the Eastern and New England trade.

Harry D. Hall, of the Republic Elevator Co., Superior, Wis., has taken a membership in the Duluth Board of Trade and secured offices in Duluth.

The Nels Enge Grain Co. of Minneapolis, Minn., has been incorporated for \$20,000. Incorporators are Nels Enge, Edwin J. Wenzel, C. M. Reese and N. J. Swenson.

E. F. Catlin, formerly connected with the Cochran Grain Co. of St. Louis, Mo., has charge of the milling wheat department of the Milliken-Helm Commission Co.

McGuire & Atwood and the Standard Grain Co. of Superior, Wis., have become members of the Board of Trade at Duluth and have removed their offices to that city.

Monroe Izor, formerly a flour inspector of the Cincinnati Chamber of Commerce, has become identified with the Early & Daniel Co. of that city as manager of their flour department.

E. H. Young of St. Louis, Mo., has taken a financial interest in the firm of W. H. Small & Co., Evansville, Ind., and will remove to that city. He is said to be an expert on grain matters.

J. M. Fuller, who has been representing the Brinson-Waggoner Grain Co. of St. Louis, Mo., on "Change," will hereafter travel for the firm on the road in territory west of the Mississippi.

James R. Cassidy, who has been superintendent of the elevators of Carscallen & Cassidy of Jersey City, N. J., for the past fifteen years, now represents that firm on the New York Produce Exchange.

Crumpton & Crumpton, formerly grain merchants at Superior, Wis., have removed their offices to Duluth, Minn. Mr. Frank R. Crumpton was last month elected a member of the Duluth Board of Trade.

Piper, Johnson & Co. is a new brokerage firm at Winnipeg, Man., with offices in the Grain Exchange Building. They have private wire connections with the principal exchanges of the United States. They will deal in grain, stocks, cotton, etc.

F. P. Brockman, of F. P. Brockman Co., St. Louis, Mo., southern shippers of grain, has formed an association with E. F. Daly, to do a receiving business in grain, hay and seeds. The firm name is Brockman & Daly, with offices in 404 Merchants' Exchange Building, St. Louis.

W. H. Lake & Co., Chicago grain commission merchants, have established a Minneapolis office under the name of Lake, Brown & Co., with offices in the Chamber of Commerce Building. The Minneapolis firm will clear its own trades. The resident partner is E. L. Brown.

The T. A. Scarlett Co. of Duluth, Minn., has incorporated for \$50,000, to deal in grain, food products, real estate and horses. Officers are Thomas A. Scarlett, president and treasurer; Daniel Horgan, vice-president, and J. C. Perry, secretary. The company's indebtedness is limited to \$10,000.

F. L. MacLean, formerly a familiar figure on the exchange floor of the New York Produce Exchange, is located at Buffalo, N. Y., as manager of the Electric Elevator & Milling Co. The plant of this company adjoins the Electric Steel Elevator of the Buffalo Creek and has a capacity of 2,000,000 bushels. The milling plant has been equipped with the most improved machinery for grinding and bagging, and automatic scales will

be used throughout the entire building. The elevator has both all-rail and lake-and-rail connections.

Trading in bids and offers at Chicago has caused a return to this city of considerable business which has been going to Milwaukee, and as a result the Milwaukee branch of Jackson Brothers, Chicago, is to be discontinued. The branch was operated under the name of Jackson Brothers & Co.

F. C. Kirchoff, who has been identified with the export department of Milmine, Bodman & Co., is now manager of the grain export department of Rice, Quinby & Co., New York City. He succeeds Frank E. Marshall, who has withdrawn from business for a much-needed rest after several years of service in the employ of Rice, Quinby & Co.

The Metzger-Hill Co. of Cincinnati, Ohio, has transferred the lease of the grain warehouse at Hopkins Street and President Place to the Southern Grain Co. The Metzger-Hill Co. does a very large business and is one of the substantial firms of Cincinnati. They will continue to handle their business from the company's general offices in the Johnston Building in Fountain Square.

A new grain commission firm at Winnipeg, Man., is the Smith Grain Co. The manager and treasurer of the firm is M. K. Smith, who for twenty years has been engaged in the grain business at Hallock, Minn., and vicinity. The president, Mr. Florence, has been in business at Northcote and Humboldt, Minn., for a number of years and is at present cashier of the bank at Humboldt. A. M. Eklund, the secretary, has been for some time a resident of Hallock.

John Buerger & Co., grain commission merchants at Milwaukee, Wis., have consolidated with the F. Kraus Co., also of Milwaukee, and the business of both firms is now carried on under the latter name. Mr. Buerger has been in the grain business for 30 years, the past 15 of which he has spent in the commission business. Messrs. Buerger & Son will have immediate charge of the receiving end of the business. Their offices are in the Mitchell Building.

Bankruptcy proceedings against Newell C. Knight and Reuben H. Donnelley, individually and as members of Knight, Donnelley & Co., the Chicago Board of Trade brokers, were dismissed October 6. The case was brought to a close by Receiver Edward C. Potter, who paid most of the creditors 27 cents on the dollar of indebtedness. By the stipulation filed J. C. O'Connor received four \$1,000 bonds and \$86 for his claims. The other creditors indorsed this stipulation and agreed to the dismissal.

FOREIGN NEWS

Duties have been re-established in Spain on grain and flour.

The granary at Millwall Docks, London, is the largest in England, being capable of holding 936,000 bushels. Ships are unloaded by suction pipes (pneumatic system) at a distance of 50 yards.

The pneumatic grain unloaders at the Rotterdam grain elevators are proving highly satisfactory as employees become more proficient in their use. There is a material saving of time in unloading bulk grain.

Says a Norfolk, England, paper: "As it usually happens when the British farmer has a great crop of anything to sell, a combination of merchants and millers can be easily formed to depress prices." "All the world is kin," it seems.

Another semi-official estimate for the crops of European Russia, dated September 26, makes wheat shortage 191,869,000 bushels; rye shortage 301,529,000 bushels, and oats shortage 176,275,000 bushels shortage—from the large crops of 1904.

The port of Kherson, on the Dnieper River, is rapidly assuming importance in the Russian export trade, although statistics of exports have not so far included those from Kherson. It was for many years the chief point where the Dnieper lighters (shallow draught) discharged into the sea-going lighters which then proceeded to Odessa by the river Bug and into the Black Sea at Otchakoff. Now Kherson has been deepened to enable steamers to go up there and load getting on for three-quarters cargo and complete mostly at Odessa, thus diverting an enormous amount of trade from Odessa, as the Dnieper is the backbone of our trade for grain arriving by water, wheat and barley chiefly. Now all contracts are made out Odessa, Nicolaieff, Kherson, and the latter port, which has had a lot of steamers lately, has all shipments lumped in under the heading "Odessa." Meantime, Odessa is getting more and more dependent on the interior, Bessarabia, Podolia, etc.

SEEDS

H. S. Church has added a feed department to his seed business at Spokane, Wash.

D. M. Belt & Son, seed merchants of Quincy, Ill., have discontinued their seed business.

The Amzi Godden Seed Co. of Birmingham, Ala., has filed articles of incorporation with a capital stock of \$40,000.

The crop of clover seed is late this year and has been moving slowly the last month with anywhere from brisk sales.

The Metzger Seed and Oil Co. of Toledo, Ohio, with a capital stock of \$150,000, has transferred its charter from Delaware to Ohio.

Herman Phillips, recently with S. W. Flower & Co. of Toledo, Ohio, is forming a company to open a seed warehouse and engage in the seed and grain business in Toledo.

A provincial charter has been issued to the Darch & Hunter Seed Co., Ltd., of London, Ont. The capital stock is \$40,000 and the provincial directors are Frederick James Darch, John Wood Hunter, George Arthur Young and John O. Richards.

It will be worth while for dealers to note the admonition in J. F. Zahm & Co.'s letter of September 30, which says: Look out for clover of poor quality. There is considerable of it. Don't pay too much for that class of seed. It will pay you to keep the bright seed separate from that which is discolored. Don't mix it. Don't pay so much attention to prime when buying from the farmer. Watch the Red Letter and see what it quotes the low grades at.

F. E. Winans, Chicago, reports October 12: The market continues weak and there was a further decline to-day of about 5 cents for dark, dirty and badly hulled seed. There is very little bright seed being offered. Country lots are quotable from \$2.45 for dark and dirty seed up to \$3.20 for fancy seed. It still pays to keep the bright seed separate from the dark and dirty, and in shipping we would advise care in keeping the different grades separate.

While it is yet too early to secure exact information on the European seed crop the indications are that there will be a good medium crop of red clover seed of fair quality. There is not quite so large a crop of white clover as last year, but the quality is reported as very good. There is also a large stock left over from last year which it is thought will cover all deficiencies in this year's crop. The yield and quality of alsike will be about the same as last year. Old stocks of alfalfa have been used up, and while the acreage is larger than in former years it is thought that prices will hold up strong. Prospects for timothy are said to be very favorable.

Cabbage seeds are produced mainly in New York state, particularly on Long Island and in Connecticut. Cucumber seeds come from Missouri, Wisconsin and Nebraska. Corn and onions for seed are raised all over the country, and the same is true of melon seeds, but carrot seeds and lettuce seeds are mostly from the far West, California contributing the best and the greatest quantity. Peas for seed are obtained from the neighborhood of Traverse, Mich., and Manitowoc, Wis., the output of that region being free from the little worms which are liable to infest peas grown elsewhere. We send immense quantities of farm and garden seeds to Europe, but import only a few kinds, such as fancy grass seeds. Of clover and grass seeds we export hundreds of tons annually, Yankee clover being in especially great demand abroad. Most of the red clover seed comes from the neighborhood of Toledo, Ohio, in which city is the principal market for that product. Nowadays clover seed is quoted as regularly as wheat and corn on the produce exchanges, and the same may be said of timothy seed. Iowa alone produced more than two and a half million bushels of timothy seed last year, and during the same twelve months we exported more than \$3,000,000 worth of grass and clover seed. Utah is of all the states the greatest grower of the seeds of that wonderful forage plant, alfalfa.

The steamer Ball Brothers cleared from Duluth on October 5 with 314,000 bushels of flax. The record was made by the Sahara, loaded a year ago, with 316,000 bushels.

The shipping record at Ft. William for crop of 1904 was 27,745,941 bushels of wheat, of which over 7,000,000 bushels went through Depot Harbor, 4,750,000 to Montreal, 3,000,000 through Goderich, etc.

HAY AND STRAW

At Wellsboro, Pa., Chas. Fought succeeds F. R. and R. W. Field, wholesalers and shippers of hay.

The twelfth annual report of the National Hay Association will be ready for distribution to members early in November.

E. H. Schulp, hay and straw baler at Van Wert, Ohio, has filed a petition in bankruptcy in the United States court at Toledo.

The hay, grain and feed store of John J. Karsten & Son, Chicago, was damaged by fire early this month. The property was insured.

La. Frentz & Karstens, wholesale dealers in hay and grain at Chicago, have certified to a decrease of capital stock from \$30,000 to \$10,000.

A hay warehouse for baled hay has been erected at Two Creeks (Two Rivers, postoffice), Wis. The house is 200x50 feet and is roofed with galvanized iron.

Fire in the hay and feed storehouse of J. F. Post, 422-424 Washington Avenue, Newark, N. J., last month, caused a loss of \$5,000, covered by insurance.

Farmers in North Dakota have been advised to save all their flax straw in anticipation of a large demand. Flax straw is used for making twine and for upholstering purposes.

The hay and grain sheds of G. W. Reynolds & Sons in Spruce Street, Boston, Mass., sustained a fire loss of \$2,000, September 27. The stock was partly covered by insurance.

An alfalfa meal mill is under construction at Mankato, Minn. The building will be built entirely of cement blocks and will be fireproof. The mill is being built by F. E. Davenport.

S. C. Johnson, who operates a grain elevator on the Northern Pacific Railroad at Crookston, Minn., has bought up a quantity of baled hay for shipment to the lumber district, where hay is said to be scarce.

Shipping oat straw is a new industry in the vicinity of Oakland, Ill., and is said to be profitable. Up to a few years ago this straw was stacked and left for cattle to eat; now the farmers are paid \$3.50 a ton for it.

A report from Endicott, Wash., says there is every indication that before the winter is over hay will command a high price on account of scant supply. Spokane buyers are contracting now for winter and spring delivery.

The Southern Grain Co., Cincinnati, Ohio, have purchased the hay warehouse of the Metzger-Hill Co., and are now in the market for all kinds of hay as well as grain. It is their intention to largely increase their shipping and receiving facilities.

More poor hay than usual has been put up around Grafton, N. D., on account of excessive rains, but there is still a good deal of prairie hay that may be secured in good condition if the farmers are particular to get it in the bunch and stack as soon as possible.

On account of an embargo placed by the Pennsylvania Railroad, the C., B. & Q. posted a notice on the Chicago Board October 10 to the effect that it would not accept reconsigning orders of hay and straw to Jersey City, Weehawken and New York Harbor points.

The early part of this month stocks of hay at New Orleans were big and the demand was light. Choice timothy was scarce at \$15 @ \$15.50; No. 1 timothy, slow at \$13. @ \$14; No. 2 timothy dull at \$11 @ \$12.50. The call for choice clover mixed hay was only fair at \$11.50 @ \$12.50.

At Pittsburg, Pa., the month opened with an excellent demand for No. 1 timothy and good No. 2 timothy. Receipts of these grades have been light. Low grade hay is still in plentiful supply. Choice timothy brings \$13 @ \$13.25 per ton; No. 1 timothy \$12.50 @ \$13 and No. 2 timothy \$10 @ \$11.50.

P. E. Goodrich, Winchester, Ind., says heavy rains have considerably damaged hay and straw ricks through central Indiana, and much of it can not be marketed. On account of the money lost last year on low grade hay he thinks shippers will not attempt to do much of anything with low grades this year.

Experiments in Indiana in growing alfalfa have shown various results—good in some sections and poor in others. Professor Fisher of the Experiment Station is of the opinion that any Indiana soil that will produce corn will grow alfalfa, but open soils are more desirable. Inoculation of the soil is not only an advantage but necessary in some fields to secure a stand. Causes of failure in In-

diana are the same as in the West, viz.: Poor drainage, pasturing when the alfalfa plant is too young, and a rank growth of weeds before the alfalfa was fairly started.

The contract for supplying hay to the United States Government at Seattle, Wash., for shipment to Manila, has been increased 20 per cent. W. W. Robinson of Seattle, who has the contract, will under this instruction furnish 3,000 tons of hay instead of 2,500 tons. The quartermaster's department has ordered the purchase also of 500 tons of eastern Washington hay for the Philippines.

T. D. Randall & Co., Chicago, Ill., report October 12: Hay market is very firm, supplies on hand are small and demand very active. Receipts for the past ten days have hardly been equal to the daily consumption, consequently prices have advanced. Choice timothy quotable at \$12.00 to \$12.50, No. 1 \$10.50 to \$11.50, No. 2 \$9.00 to \$10.00, lower grades \$6.00 to \$8.50, rye straw firm at \$7.00 to \$7.50, oat and wheat straw \$5.50 to \$6.00. Choice Kansas and Indian Territory prairie hay firm at \$11.50 to \$12.00, No. 1 \$10.00 to \$11.00, lower grades \$7.00 to \$9.50. Choice Iowa, Minnesota and Nebraska prairie hay \$9.50 to \$10.00, No. 1 \$8.00 to \$9.00, lower grades \$6.50 to \$7.50. Illinois, Indiana and Wisconsin feeding prairie hay \$6.50 to \$7.00, packing hay \$5.50 to \$6.00. Advances of shipments are very light, which would indicate light arrivals for some time to come, and there is no question but what present market will be well maintained, and cannot urge holders of hay too strongly to make a special effort to get their hay on present market, believing that results will be better than any time later on.

The hay commission firm of Gleichmann, Johns & Pratt, New York City, formed five years ago by William Gleichmann, Fred L. Johns and Walter M. Pratt, was dissolved September 19 by mutual consent. The business will be continued by Fred L. Johns and Walter M. Pratt, under the name of Johns & Pratt. Mr. Gleichmann leaves the firm to devote his entire attention to his retail feed business in Brooklyn, which, during the past few years, has grown rapidly. The business will be continued at the same location, Twenty-sixth Street and Eleventh Avenue, with every facility shippers have enjoyed in the past. Since the formation of the old firm in 1900, this firm has grown from nothing to a point where it is recognized as a strictly commission house, second to none in New York. Messrs. Johns and Pratt have for several years given their personal attention to the actual business of caring for consignments and will continue the business along essentially the same lines as they have been doing. They are comparatively young men, but have had considerable experience in this line, and this, combined with a natural aptitude for business and a desire to do the very best possible on every shipment, has won for them a host of friends in the hay trade not only among the shipping fraternity but among their competitors as well. The new firm is incorporated for \$10,000.

H. H. Freeman & Co.'s market report, Chicago, October 12, says: Timothy—Market firm and fairly well cleaned up on all grades. Choice lots are scarce. Should receipts continue light, as at present, a slightly better price will prevail. Receipts for the past ten days have been decreasing, the consumption having been greater than the arrivals. We cannot too strongly urge you to take advantage of the market we will have during the next 30 days. The corn crop will absorb attention generally for some time, as the crop is extremely large and will necessarily take longer than usual to care for it. After this work is concluded, however, there will be little to interrupt the continuous, free movement of hay, and the crop will come in later on and sell at materially lower prices than it will now command. Prairie—Not much is arriving from any section, outside of state hay, which is more plentiful and some lower. Kansas hay is scarce and the top grades are in good request. Redleaf, poor hay is less wanted and sells more slowly. Color to hay is an important essential and the value of hay depreciates as it is lacking in this essential. The midland prairie from Iowa and Minnesota are not moving this year as in former seasons. This class of goods may move later on, but its value is not great and at present farmers are not taking the time to ship it, but are attending to other duties. State feeding and packing hay is in ample supply, a large portion of the receipts being of this class. Do not let your hay stand in stack exposed to the fall rains. Bale and put in the barn or else ship it, for it will bring more now than if you permit it to get stained, discolored and spotted. Do not look for high prices this year, for the crop of corn, oats, hay, etc., greatly exceeds that of last season. When grain is cheap it will be fed more freely and less hay used, which is a further argument against higher hay prices.

HAY ASSOCIATION COMMITTEES.

President Voris has announced the standing committees for the National Hay Association for 1905-6, the following being the chairmen named: Arbitration—E. M. Wasmuth, Roanoke, Ind. Legislation—W. L. Fain, Atlanta, Ga. Interstate Commerce—J. S. Cissel, Washington, D. C.

Terminal Facilities—J. W. Dusenbery, New York. Standard Bales—Geo. S. Bridge, Chicago. Cipher Code—J. L. Johnson, Pittsburg, Pa. Quotations—Chas. J. Austin, New York. Statistics—S. T. Beveridge, Richmond, Va. Transportation—Geo. S. Loftus, St. Paul. Demurrage—Fred Muller, New Orleans. Grades—C. W. Tingley, Columbus, Ohio. Special on Grades—J. A. Heath, Lenox, Mich.

MICHIGAN HAY OUTLOOK.

As forecasted a couple of months ago the Michigan hay situation is not all that the shipper could wish for. Most of the hay was damaged by rains during the summer and through delay in securing it at the time of wheat harvest. Some hay, however, was secured without water damage at harvest and a few handlers of Michigan hay believed it would go on the market as No. 1 timothy; but except in a few instances this hay shows but little color when baled and is mixed too heavily with clover to be graded higher than No. 2.

As a result of the frequent discussions on the subject shippers seem inclined to be more cautious than they have been the last few seasons and are paying the farmer a price for his hay which they can be sure will not prove to have been too high when the hay is shipped to market. There is undoubtedly plenty of hay in Michigan of fair to good quality, but the proportion of No. 1 is very small.

MINNESOTA HAY INSPECTION.

The hay inspection law passed by the Minnesota Legislature is not yet in thorough working order. The roads at St. Paul have been slow in putting in scales as required by the law and consequently there has been much delay in weighing cars, principally after they have been unloaded. Some shippers to St. Paul have been marking their cars "not for inspection," and the fees from those inspected have hardly been sufficient to maintain the bureau. This trouble, however, has not been experienced at Duluth.

Cars are weighed before and after unloading, and the railroad companies at St. Paul and Minneapolis have been exacting an extra switching charge for the return of empty cars from the scales after weighing.

A conference on this point was held at Minneapolis September 26 between the representatives of the railroads and the receivers and shippers of hay. The matter is now up with the Railroad and Warehouse Commissioners, and dealers interested anticipate the matter will be adjusted in the near future. It is a case where there is a contention between the commission and the railroads.

HAY CROP ESTIMATE.

The Orange Judd Farmer estimates the hay crop of the year as "normal to slightly above normal in practically every section of the country," against a shortage in yield in some states and a heavy yield in others for both the preceding years. The total area devoted to hay this year, as finally estimated, is 40,306,000 acres; average rate of yield, 1.45 tons per acre, and the total crop 58,330,000 tons. The showing in detail by states is as follows:

	Acres.	Per Acre.	Tons.
New England.....	3,939,000	1.15	4,530,000
New York.....	5,166,000	1.45	7,491,000
Pennsylvania.....	3,228,000	1.50	4,842,000
Texas.....	442,000	1.60	707,000
Arkansas.....	86,000	1.50	129,000
Tennessee.....	390,000	1.55	605,000
West Virginia.....	528,000	1.40	739,000
Kentucky.....	429,000	1.37	588,000
Ohio.....	2,630,000	1.55	4,077,000
Michigan.....	2,236,000	1.47	3,287,000
Indiana.....	1,787,000	1.39	2,484,000
Illinois.....	2,722,000	1.25	3,403,000
Wisconsin.....	1,861,000	1.98	3,685,000
Minnesota.....	876,000	1.74	1,524,000
Iowa.....	3,101,000	1.76	5,458,000
Missouri.....	2,522,000	1.19	3,001,000
Kansas.....	2,005,000	1.39	2,787,000
Nebraska.....	585,000	1.70	995,000
North Dakota.....	144,000	1.40	202,000
South Dakota.....	190,000	1.40	266,000
California.....	611,000	1.25	764,000
Oregon.....	344,000	2.00	688,000
Washington.....	325,000	2.10	683,000
Oklahoma.....	235,000	1.25	294,000
Other.....	3,924,000	1.30	5,101,000
Total.....	40,306,000	1.45	58,330,000
1904.....	40,098,000	1.45	58,164,000
1903.....	40,037,000	1.44	57,806,000

These figures are intended to include only the

cultivated grasses, wild and slough hay not being counted, nor is millet nor small grain cut for hay.

NEW YORK HAY EXCHANGE.

At the meeting of the New York Hay Exchange Association, held October 4, new committees were appointed as given below:

Railroads—E. A. Dillenbeck, F. Williams, C. B. Morris, Frank Dusenbery, Perry Hatch, W. J. Overocker, F. L. Lewis. A terminal committee was also named which is really part of the railroad committee, consisting of C. J. Austin, F. Williams and E. A. Dillenbeck.

Arbitration—O. K. Linabury, F. A. Slingerland, W. A. Fuller.

Resolutions—C. J. Leward, A. F. Fisher, J. Middlewood, W. Hasbrouck.

Membership—F. A. Slingerland, John A. Murray, P. C. Lynch, George N. Reinhardt, F. A. Vrooman.

Rules—A. A. Hanks, T. P. Huffman, H. Ingersoll, John A. Murray, H. F. Hotelling, Charles Ladue, G. M. Dickerson.

Quotation—George E. Van Vorst, Fred Williams, F. A. Jones, A. A. Hanks, Edward Vreeland, J. M. Hait, W. C. Bloomingdale.

A special committee composed of E. D. Miner and W. J. Overocker was appointed to confer with the traffic managers of the railroads entering New York with a view to adjusting satisfactorily certain of the fixed charges, which the trade believes are excessive.

The Exchange Association is a strong organization of the leading hay commission firms in New York City and it is anticipated there will be much benefit to the hay trade at large as a result of its activity.

BEAN CROP UNEVEN.

The last two weeks of September were devoted to harvesting and thrashing field beans in Michigan and New York. As to the yield, Orange Judd Farmer says: "Generally it appears the Michigan promise is better than in the Empire state, and these two sections dominate the field bean situation. In Michigan the early part of the season was too wet, but reports from such counties as Allegan, Hillsdale, Jackson, Calhoun, etc., tell of fairly good harvesting weather for the most part. Thus returns on all but low, heavy lands may prove fairly satisfactory. Early thrashings in Jackson, showed an average yield around 12 bushels per acre.

Various reports from some leading bean counties of New York complain of the yield not coming up to expectations. The season has witnessed plenty of moisture for the crop, too much, in fact, and in some counties more or less rust was reported.

A farmer near Reardan, Wash., thrashed 23 acres of oats that averaged 124 bushels per acre.

The steamship Iowa on September 16 completed loading 32,000 bushels of wheat at Galveston for export, being the first boat out of that port with grain this season.

Wheat receiving stations in eastern Washington report heavy deliveries of grain, but comparatively few sales, farmers preferring to store and pay charges to selling in the neighborhood of 60 to 65 cents.

It is said many elevator companies in South Dakota have failed to publish their rates for the storage of grain for the year beginning September 1. Under the law the negligence may subject the delinquent to a fine of \$100 to \$1,000, as well as imprisonment.

Bids for seed to arrive are generally below the current prices, dealers discounting more or less for deferred shipment. Country shippers are fully as able to take chances on this difference as Toledo dealers. Competition is very keen here for spot seed, and clover sent us on consignment gets the benefit of it. At times one may strike a market upon which he will lose a little, but by keeping it coming as fast as you buy it you make a good average, besides getting the difference between spot seed and seed sold to arrive. One of our best shippers has followed this plan for four years and says he makes money by so doing.—Zahm & Co., Toledo.

The newspapers announce that Secretary Shaw will deposit, wholly in the New York City banks, \$20,000,000 of government money. Thus the Wall Street speculators in "lithographs" at the first signs of stringency, are helped by "the treasury" to sustain prices. We have seen wheat sell in this market at 48½ (1895), corn at 19½ cents (1896), and oats at 14½ cents (1896), but we have never known the government to offer so much as a word in support of cereals, though all its clap-trap spellbinders invariably assert that "agriculture is the basis of the nation's prosperity." The West is easily satisfied—easily humbugged.—Pope & Eckhardt Co., September 13,

PERSONAL

George Atlvig is buying grain for Jennison Bros. at Arco, Minn.

Martin Pelton has taken charge of the elevator at Patsey, N. D.

Pat Bailey has taken charge of the new elevator at Carbury, N. W. T.

Frank Boldt is the new manager of the Brown Elevator at Sibley, Iowa.

C. D. Bacon is now agent for the Monarch Elevator Co. at Pillager, Minn.

J. C. Minert now has charge of the Interstate Elevator at Danvers, Minn.

William Gilmore has taken charge of the National Elevator at Heriot, N. D.

Arthur Reitz now has charge of the Carlon & Beardslee Elevator at Corsica, S. D.

Theron D. Platt is the new agent for the Gibbs Grain & Fuel Co. at Fargo, N. D.

Frank Keeler is in charge of the new elevator recently erected at Buchanan, N. D.

Fred Woodworth is now buying grain at Tagus, N. D., for the Twin City Elevator Co.

Eric Lund is now buying grain at the Great Western Elevator at Hitterdal, Minn.

George Page is managing the interests of the MacLean & Page Co. at Sables, N. D.

John Traynor has left Bowbells, N. D., to take charge of a grain elevator at Flaxton.

Henry Narveson has assumed the management of the Soo Elevator at Erskine, Minn.

Andrew Krause has taken charge of H. Gund & Co.'s grain elevator at Rosemont, Neb.

G. O. Blegen has accepted a position as grain buyer with G. L. Chesley of Armour, S. D.

Joseph Reuter has been appointed manager of Koenig & Co.'s elevator at Garrison, N. D.

W. E. Jennings of Milton, N. D., is buying grain for the Empire Elevator Co. at Corona, S. D.

Walter Carr has taken charge of the Eagle Roller Mill Co.'s elevator at Gettysburg, S. D.

W. E. Jennings has left Milton, N. D., to take charge of the grain elevator at Milbank, S. D.

A. W. Plaster has taken charge of the Northern Supply Co.'s elevator at Saint Croix Falls, Wis.

G. J. Miller of Harvey, N. D., is now representing the Cargill-Robb Elevator Co. at Kenmare, N. D.

William O'Neil of Minnewaukon, N. D., has taken charge of the Lahart Elevator at Lahart.

Henry Bohan of Mankato, Minn., has accepted a position in the National Elevator at Easby, N. D.

Will Edge has left Lakota, N. D., to resume charge of the A. G. Tanton's Elevator at Lawton.

M. L. Hunt, formerly of Crystal, is buying wheat for the Crookston Milling Co. at Crookston, N. D.

L. L. Lundell has sold his mill at Marshall, Ill., and is now buying grain for Bartlett, Kuhn & Co.

J. F. Donovan & Co. have secured A. S. Howell to manage their grain elevator at Hardin, Iowa.

W. A. Lemon of Graceville, S. D., is buying wheat at the S. E. Oscarson Co. elevator at Whiterock, S. D.

C. E. Hedlund of Wilton, N. D., is now local agent at the Washburn Elevator at Underwood, N. D.

George Fuller has succeeded M. L. Hunt as grain buyer for the Imperial Elevator Co. at Crystal, N. D.

Al. Hunt has accepted a position as grain buyer in the National Elevator Co.'s elevator at Lawton, N. D.

The Minnesota Grain Co.'s elevator at Hoffman, Minn., is open with Andrew Gulbranson as buyer.

S. E. DeLong has succeeded H. C. Calvert as manager of the Bemidji Elevator Co. at Bemidji, Minn.

E. E. Otis has gone to Cogswell, N. D., to buy grain for the elevator managed by M. Swan of Britton.

C. E. Allen has been engaged by the Atlantic Elevator Co. to manage its grain elevator at Warren, Minn.

Myron Knudson of Mondovi, Wis., has taken charge of the Northern Grain Co.'s elevator at Boyd, Wis.

Chauncey Gien has accepted the position as grain buyer at Wayburn, Minn., for the Western Elevator Co.

Austin Baalson has returned to Glenwood, Minn., to assume the management of Dougherty's Elevator on the Soo, the position made vacant by the ap-

pointment of George Gilbertson to the office of sheriff.

Ross Everson has succeeded A. E. Smith as agent of the St. Anthony & Dakota Elevator at Leeds, N. D.

J. H. Cline has left Kulm, N. D., to accept a position in the elevator at Wishek, N. D., for Gackle & Co.

A. D. Halliday of Hensel, N. D., has assumed the management of the McCabe Elevator at Cavalier, N. D.

Henry Duechler has been engaged as assistant grain buyer at the G. Doering & Co. elevator at Goodrich, N. D.

Lewis Eastman has been engaged as superintendent by Follett & Emert in their grain elevator at Dewar, Iowa.

John O. Clagham has been engaged as grain buyer for the Crown Elevator Co.'s elevator at Frederick, S. D.

Chris Hillesheim has been engaged to buy wheat for the Great Western Elevator Co. at Sleepy Eye, Minn.

William Lindgren has accepted a position as wheat buyer in the Bruce-Edgerton Lumber Co. at Strandburg, S. D.

J. L. Koehne has gone to Mandan, N. D., where he has accepted a position as grain buyer for the elevator at that place.

H. A. Johnson is looking after grain shipments at Park River, N. D., for McGuire & Atwood of Minneapolis and Duluth.

L. E. Viets has resigned his position at Felton, Minn., as agent for the Jenkins Elevator Co. and has gone to Kulm, N. D.

William Maloney has accepted a position as wheat buyer for the Perry Elevator Co. on the Soo Line at Alexandria, Minn.

A. E. Peterson has left Hallock, Minn., for Irene, N. D., where he has accepted the agency of an elevator at that place.

A. Pearson of Minneapolis, Minn., has succeeded W. T. Spillane as agent for the Thorp Elevator Co. at Red Lake Falls, Minn.

Peter Berger, formerly of Arlington, Minn., has been employed as grain buyer for the Pacific Elevator Co. at Green Isle, Minn.

Thomas W. Harper of Park Rapids has been engaged as grain buyer at the Interstate Grain Co.'s elevator at Leaf River, Minn.

Walter Ramsdell has left Sebeka, Minn., to take the management of the St. Anthony and Dakota Elevator at Mallory, Minn.

E. J. Huff has left Minneapolis, Minn., to assume the duties of agent for the Victoria Elevator Co.'s elevator at Pembina, N. D.

C. E. Crosen of Argonia has been appointed deputy state grain inspector for the state of Kansas, with headquarters at Wellington, Kan.

George Lillie has left Felton, Minn., for McCumber, N. D., where he has accepted a position as local agent for the Amenla Elevator Co.

John Cowan, recently agent for the Cargill Elevator Co. at Knox, N. D., has accepted a similar position with the same firm at Newburg, N. D.

N. P. R. Nelson, who has been in the employ of the Woodworth Elevator Co. at Carlos, Minn., has opened the Woodworth Elevator at Parker's Prairie.

John Young has left Baldwin, N. D., where he has been buying grain for the Washburn Elevator Co., and is buying for the same company at Mannhaven.

Albert Smith, who has had charge of the St. Anthony and Dakota Elevator at Leeds, N. D., for the past eighteen years, has resigned the position.

A. Walch, who has had charge of the London Elevator of the Myrtle Grain Co. of Myrtle, Minn., has resigned that position and will go into other business.

Willis P. Buckingham has resigned his position as agent for the Duluth Elevator Co. at Park River, N. D., to accept a position with the Park River Roller Mills, as grain buyer.

E. P. Williams, recently superintendent of Elevator "B" at Galveston, Texas, is now associated with the Galveston Wharf Co. as superintendent of Elevator "A" in that city.

Harry C. Calvert has resigned his position with the Bemidji Elevator Co. at their elevator at Bemidji, Minn., and has engaged in the grain brokerage business at that place.

C. E. Needham, formerly of Winside, Neb., has removed to Anamosa, Iowa, where he will take charge of a line of elevators which are to be built this fall from Anamosa to Quasqueton.

Andrew L. Opland, who has been grain clerk for twelve years with the Great Northern Railroad, at Superior, Wis., has accepted a position with the Duluth Grain Sampling and Inspection Bureau at Duluth, Minn.

CROP REPORTS

The state crop report of Kentucky for October says the corn crop is a full one. The yield of wheat per acre is a little below the average for the state. Oats and rye are above the average.

The careful selection of seed last spring which prevailed almost universally in Maryland will give that state a bumper crop of corn this fall. It is thought that the yield is fully 40 per cent above the average.

Corn in Indiana matured and dried rapidly, and good progress was made in cutting and shocking early in October. As a whole, the reports are that a better crop of corn in either quantity or quality was probably never sown in the state.

The cutting of corn has been progressing rapidly in the eastern states, and the late crop is nearly safe from frost. The soil was in excellent condition, seeding well advanced, and early sown wheat has been coming up nicely in most sections.

Corn in Nebraska was fully matured by the first part of October and was in no danger from frost. There will be no light or soft corn this fall, thereby enhancing the value of the regular crop. Nominally the same conditions prevail in the Dakotas.

Corn is continuing to dry and mature rapidly in Illinois, and it is estimated that less than one-twentieth remains exposed to injury by frost in the northern half of the state. The crop is reported much above the average in the northern district and very satisfactory elsewhere.

For the past two weeks Kansas farmers have been harvesting the most valuable corn crop ever grown in the state. The lowest estimate of the total yield is 250,000,000 bushels. F. D. Coburn, secretary of the State Board of Agriculture, has placed the wheat yield of Kansas at 75,576,867 bushels, the third largest crop ever raised in the state.

The report of the Ohio Department of Agriculture on October 1 says that corn prospects are estimated at 89 per cent, compared with an average. The crop matured rapidly, with very little danger now from injury by frost. Total estimated product of wheat for 1905, 32,157,131 bushels; oats, 1,454,554 bushels; barley, 863,004 bushels; rye, 1,031,471 bushels.

According to the report issued October 6 by the secretary of the State Board of Agriculture the corn crop of Missouri this year will amount to 233,000,000 bushels, a decrease during the month of 23,500,000 bushels. The crop estimate is based on an acreage of 7,076,000, with a yield per acre of 33 bushels. Over 90 per cent of the crop is safe from killing frosts, and about one-third has been cut for fodder. Because of the wet weather during last month many creeks and small rivers overflowed, causing a heavy loss. Wheat seeding was also greatly delayed by wet weather, and only 40 per cent of the crop is in the ground, whereas almost all of it should be sown by this time. The condition of wheat is 93, which is above the average for this time of year. The acreage will be practically the same as last year.

The government report October 10 made no great change in the indicated yields of grain, the most material departure from the September figures being a gain of 39,000,000 bushels in the oats crop over the yield suggested last month. The average yield of that cereal was put at 33.9 bushels to the acre, which figures out a crop of 239,000,000 bushels, or 44,000,000 bushels larger than the official estimate of last year. The corn condition was placed at 89.2, against 89.5 last month, 83.9 last year, and a ten-year average of 80.2, or on a par yield of 31 bushels, suggesting an average yield of 27.6 bushels to the acre, or a crop of 2,595,000,000 bushels, against 2,600,000,000 bushels last month, or on a par of 32 bushels, a total of 2,679,000,000 bushels. The former basis makes the crop 128,000,000 bushels larger than last year, and the latter 212,000,000 bushels larger. The surplus wheat average yield was made 14.7 bushels to the acre, subject to final revision in December. This makes the crop 259,000,000 bushels, 2,000,000 bushels under the total indicated last month, and 32,000,000 bushels more than raised last year. Taking the government figures on winter wheat, 424,000,000 bushels, the wheat crop is 683,000,000 bushels. The preliminary estimate of yield per acre of barley is 26.7 bushels, against 27.2 bushels a year ago, and a ten-year average of 25 bushels. The average for quality is 86.2, against 88.7 last year. The yield per acre of rye is 16.6 bushels, against 15.2 bushels last year, and a ten-year average of 15.2 bushels. The

average condition of buckwheat was 91.6, against 91.8 a month ago, and 88.7 in 1904; flax was 91.5, against 94.2 a month ago and 87.0 in 1904.

Estimates of Iowa corn and oats crop, issued on October 10 by Geo. A. Wells, secretary of the Iowa Grain Dealers' Association, was as follows: "Averaged reports of October 1 from grain dealers show the acreage of corn to be 105, and oats 105, as compared with last year's acreage, based at 100. Same reports indicate an average yield for Iowa of 40 bushels of corn and 36 bushels of oats per acre. Final estimates of United States Agricultural Department for 1904 crops were 9,295,683 acres of corn yielding 32.6 bushels per acre, total crop 303,039,266 bushels, and 3,822,600 acres of oats yielding 32 bushels per acre, total crop 122,323,200 bushels. The crop estimate by the Agricultural Department for September, 1905, was 8,767,000 acres of corn, total crop 324,379,000 bushels, showing an average yield of 37 bushels per acre, and 3,746,000 acres of oats, total crop 133,806,000 bushels, showing an average yield of 36 bushels per acre. The fact that crop conditions have been extremely favorable during the month of September for maturing the late corn, that seemed questionable September 1, would warrant the expectation that the government will increase the yield per acre in their report for October, which will narrow up the difference between the government report for September and Grain Dealers' report for October on yield of corn per acre, while the two reports show exactly the same yield of oats per acre, to wit: 36 bushels. It would seem certain that the average yield of corn must be close to 40 bushels per acre, and as this is the third time the Grain Dealers have made the estimate of average yield of oats 36 bushels per acre and the government report being identical, would seem to make this figure almost unquestionable. If we compute the total crop for 1905, using the government figures of 1904 for the acreage on basis of the Grain Dealers' reports, we would have 9,760,467 acres yielding 40 bushels per acre, total crop of 390,418,680 bushels of corn; likewise, regarding the oats, we would have 4,013,730 acres yielding 36 bushels per acre, total crop of 144,494,280 bushels of oats. Acreage is the uncertain element in making up the crop estimates at this time, and it is my personal opinion that as a general rule the acreage computed in crop statistics is much too large, but I do not believe that Iowa has a less acreage of corn this year than last."

THE CO-OPERATIVES

The Farmers' Elevator Company of Campus, Ill., has declared a 5 per cent dividend on the capital stock and also makes a showing of \$2,000 worth of improvements on their property.

The Farmers' Elevator Company of Lismore, Minn., recently voted to borrow \$4,000 to use in conducting the business this year. They also decided to make arrangements for leasing a site so they might build next year.

P. H. Pelkey, contractor, has levied an attachment on the Farmers' Elevator Company's house at Halstead, Kan., for \$2,927.27, amount due on his construction contract. Garnishee notices also have been served on the stockholders.

There has been a lively scrap for the new grain at Hector, Minn., and as a result the farmers' company closed the doors of its elevator pending a peace. The farmers hauling are getting the benefit of 3 to 4 cents above the average margin.

An order was allowed at Crookston, Minn., against the Farmers' Elevator Company of Neillsville, Minn., allowing nearly all the claims presented. The receiver, Lucius Miller, has been instructed to pay all the accounts outstanding that can be paid out of the funds available. These will fall about \$640 short of debts outstanding.

The Society of Equity at Rochester, Minn., is said to be trying to make an arrangement with local bankers to have the bankers loan money on grain so that farmers will not have to sell their produce in order to get ready money. If this plan is carried out a warehouse will probably be built and when a bank loans money on grain, the grain will be stored away in the warehouse to insure payment of the loan. That ought to be easy—too easy to require a mass meeting to make the proposal.

The Farmers' Elevator Company at Spiritwood, N. D., has gone into the hands of a receiver on petition of McCarthy Bros., grain commission house at Duluth, who are the largest creditors. It is understood that the liabilities of the company amount to between \$15,000 and \$18,000, while the assets include some \$7,000 worth of grain, about \$500 worth of coal, a building that cost \$5,500 and

\$1,700 in cash. McHugh-Christianson Co. of Minneapolis are said to have succeeded in becoming a preferred creditor in the amount of \$7,000 by securing a mortgage on some 14,000 bushels of grain in the elevator which, owing to the scarcity of cars, was not shipped before the mortgage given by the company was placed on record. R. E. Hull of Fargo is president of the company and H. L. Hull is also largely interested in the concern, the two practically owning all the stock. Among other liabilities are a number of checks for wheat drawn on a Jamestown bank which were not paid on presentation. It is said to be probable that the affairs of the company will be made the subject of a public investigation.

FIRES--CASUALTIES

Spangler Bros.' grain elevator at Defiance, Ohio, was burned in October.

F. Louy's Sons elevator at Stryker, Ohio, was burned the last part of September.

The elevator owned by Britt Hart at Washington, Pa., was damaged by fire on October 6.

The Hathaway-Keath Grain Co.'s elevator at Mexico, Mo., was burned on the night of September 19.

The Cargill Elevator at Page, N. D., collapsed the last part of September from too great pressure of grain.

E. H. Vankirk's new elevator, near Silver City, Iowa, was wrecked in a severe windstorm September 19.

The Middle Division Elevator Co.'s grain elevator at Harvey, Ill., was damaged by fire on the morning of October 1.

The Chas. H. Lilly Co., wholesale grain dealers of Portland, Ore., suffered a loss from fire of \$35,000 on October 3.

A. Waller & Co.'s grain elevator at Henderson, Ky., was damaged by fire shortly after 4 o'clock on the afternoon of October 3.

The Schultz Grain Elevator at Hillview, Ill., was burned on the night of September 17. A large amount of grain was also consumed.

The King Milling Co.'s grain elevator at Lowell, Mich., was burned at 1 a. m., September 19. Loss about \$2,000, with a partial insurance.

The grain elevator at West Ridge, Ill., was destroyed by fire in September. Loss \$7,000, with insurance of \$5,000. The elevator will be rebuilt.

Either the elevator was too full of grain or faulty construction was the cause of the collapse of the Farmers' Elevator at Leal, N. D., recently.

Friction in the machinery caused a slight blaze in the Interior Transfer Elevator Co.'s elevator at South Bend, Ind., on the afternoon of September 16. The damage was nominal.

Fire destroyed the grain elevator at Rileysburg, Ind., at 3:15 a. m., September 18. The elevator was filled with grain which was only partially insured, the loss being about \$8,000.

A part of the Marshall Milling Co.'s grain elevator at Mansfield, S. D., gave way in September and several hundred bushels of wheat were deposited on the railway tracks. No one was injured.

A fire caused considerable damage in the Empire Mill's elevator at Columbus, Ga., at 3 a. m., September 29. It was thought the fire originated from friction which caused the dust of the elevator to ignite.

Ewing Bros.' grain elevator at Newton Hamilton, Pa., together with a large amount of grain, was burned September 25. The fire was thought to have been of incendiary origin. Loss \$15,000, with partial insurance.

The Lariviere Farmers' Elevator at Lariviere, Man., was damaged by fire which started shortly after 9 a. m., September 22. The fire was extinguished by a bucket brigade. The damage to the building was about \$300.

The large grain and hay establishment of George W. Reynolds & Son at Chelsea Station, Boston, Mass., was damaged by fire at 8 p. m., September 28. It was thought the fire was started by incendiaries. Loss about \$3,800.

The grain elevator at Gessie, Ind., near Perrysville, was burned at 2 p. m., September 18. About 1,000 bushels of oats and a considerable amount of wheat was destroyed. Loss \$8,000, with a partial insurance.

John Wilson met his death on September 15 by being smothered to death in one of the grain tanks of the Gulf Elevator at Kansas City, Mo. Grain had not been running freely from the hopper in one of the grain tanks and he had gone to remedy the trouble. It was later thought he had

lain down on the grain and fallen asleep, as that seemed the only possible chance of his being smothered in the hopper.

The grain elevator belonging to D. C. Miller at Oxford, Ohio, was burned early on the morning of September 13. The fire started near the cupola from an unknown cause. A large amount of grain was consumed. Loss \$9,000, covered by insurance.

The Williamson Elevator at Idana, Kan., was burned on the morning of October 2. The elevator had a capacity of 10,000 bushels and at the time of the fire contained 3,000 bushels of wheat, 1,000 bushels of corn and 1,000 bushels of oats. The cause of the fire was not known.

The Haefner Elevator at Alma, Wis., leased by the R. E. Jones Co. of Wabasha, Minn., was burned on the night of September 28. The fire started from sparks from a passing locomotive. The elevator contained about 6,000 bushels of barley. Loss \$4,000. The house will be rebuilt at once.

The Alexander Brown Milling and Elevator Co.'s plant at Toronto, Ont., was burned at 1:25 a. m., September 19. The fire started in the elevator shaft, from which it spread to the main building. About 50,000 bushels of wheat were consumed. Loss on buildings \$100,000 and on stock \$60,000.

The large grain elevator of J. H. Main & Sons at Delaware, Ohio, caught fire from a spark from a passing locomotive shortly after 9 a. m., September 26, and was burned. Loss on building, \$1,800, on which an insurance was carried of \$800; loss on stock, \$1,800, with an insurance of \$1,000.

Wagner & Son's grain elevator at West Concord, Minn., was burned on the night of September 27. The fire was supposed to have originated from sparks from a passing engine. About 900 bushels of grain were burned. Loss, \$1,500, with partial insurance.

The grain elevator at Ixonia, Wis., owned by H. E. Humphrey, was burned late in the afternoon of October 2. It was thought the fire caught from a passenger train, which had left just before it was discovered. There was no insurance on the building and it contained little of value.

The large grain elevator owned by the C. M. & St. P. Railroad at Maquoketa, Iowa, was damaged by fire at midnight, September 24. The fire was discovered before it had gained great headway, and was extinguished by the city fire department. Loss about \$5,000, covered by insurance.

The grain elevator at Hensel, N. D., gave way recently with its load of 42,000 bushels of wheat and 10,000 bushels of flax. The accident caused considerable loss aside from the damage to the building, as there was delay in getting cars to move the grain so that the elevator could be repaired.

The wholesale and retail grain and hay warehouse of the C. E. Spooner Co. on North Commercial Wharf at Newport, R. I., received damages amounting to \$8,000 on October 8 from fire. The fire started in a small unoccupied shed on Scott's Wharf adjoining the Spooner establishment and worked through a brick wall into the hay storeroom.

The Stockton Milling Co.'s grain elevator, flour mill and warehouse at Stockton, Kan., was burned at 10 p. m., September 26. The fire originated in the elevator supposedly from a hot journal. The mill building was of frame, the boiler and engine house being of stone. Insurance on plant, \$9,500, settled at \$8,500; insurance on stock \$7,500, settled at \$4,000.

Fire, supposed to be of incendiary origin, did \$50,000 damage to two Chicago hay, grain and feed stores October 10. A loss of \$35,000 was on the store of Kemper Bros. at 663-665 North Halsted Street. The second fire was in the store of Fred Grimsell at 1521-1523 Milwaukee Avenue, and damaged adjoining property. Mr. Grimsell discovered a small blaze among some hay in the rear of his store which burned so rapidly it was beyond control before he could get a pail of water. His hands and face were slightly burned.

But for very timely help the Howard Elevator at Edgerton, Minn., would have burned in September. The blaze was noticed in the engine room by parties who chanced to be passing the elevator, and they were able to extinguish it before serious damage had been done. The fire was caused by the heated condition of the exhaust pipe of the engine. The pipe passed out of doors about eight inches under the sill of the engine room through a foundation of cement and stone. The steady running of the engine all day had heated the cement and stone so hot that the sills ignited. When discovered the fire was under good headway and would have soon reached the gasoline tank.

The quality of wheat arriving at Winnipeg is indicated by the record for September 20, 21 and 22, when of 1,452 cars handled no less than 1,245 were contract; or, in other words, 224 cars were No. 1 hard, 834 No. 1 northern and 192 No. 2 northern.

IN THE COURTS

The case of the Farmers' Independent Elevator Co. at Denbigh is again in the courts at Fargo, N. D., to settle a matter of insurance on the elevator burned nearly two years ago.

The Jones Grain Co., Nebraska City, Neb., has brought suit in the County Court against the Postal Telegraph Co. for \$70 damages for failure to deliver a message promptly, thereby causing them to lose that amount of money on a grain deal.

In the action of Henry Godfreyson, a farmer living near Rodney, Iowa, against the Neola Grain Company, tried at Onawa, a verdict has been rendered for the Elevator Company. Godfreyson claimed that he was injured by falling into the dump while driving a team into the defendant's elevator at Rodney, and asked \$5,000 damages. The court held there was contributory negligence.

Geo. Haynes has sued the Updike Grain Co. at Omaha for \$10,000 damages for personal injuries. He alleges that while employed on construction of the grain elevator at South Omaha he was holding a piece of corrugated iron to the top of the building, when the rope broke, letting it fall a distance of 140 feet. It struck him on the neck. He states that he sustained a concussion of the brain and spinal cord, paralysis of muscles of the neck and other injuries.

Action has been filed at Lincoln, Neb., by Chas. Kubach against the A. M. McDermott Grain Commission Company to recover \$2,631.25 which the plaintiff claims to have deposited with the defendant company as margins on two deals in wheat. He asserted he sold 80,000 bushels of the grain in two days, and claims that in neither transaction did the commission company fully perform its duty to him as his agent. Mr. McDermott replies that the case is simply one of a loss in the usual course of business.

Mark Bates secured a judgment on September 21 against Harry Wood for \$1,425, before Judge Gary. The suit grew out of a contract between the parties, who are commission merchants at Chicago, for the sale of 60,000 bushels of wheat at 82½ cents, the price of wheat the day the contract was made, September 13, Bates being the purchaser. The offer was to be closed the next day. September 14 the price of wheat rose to 85½ cents. Bates alleges that Wood refused to live up to the contract and suit was brought for the difference in the selling prices of wheat September 13 and 14.

In the case of P. Olund and others against P. Hueffner, at Durand, Wis., the referee has filed a decision in favor of the plaintiff. Hueffner was lessee of an elevator at Pekin owned by E. H. Pfaff, and the latter bought grain thereat as the agent of Hueffner. In the course of business, a number of farmers put grain in the house for storage, accepting the usual documents therefor. When the elevator was burned, the farmers demanded their grain in store or payment therefor, a demand which Hueffner refused on the ground that as agent Pfaff was not authorized to issue warehouse receipts or to accept grain for storage. Hence many suits, the one at bar being the test case.

B. R. Beall of Kansas City has filed two suits against the Kansas City Board of Trade. In the first he claims damages of \$2,150, and alleges that had sold his membership in the organization for that amount and that it was being withheld at the instance of the Adams Grain Company, which claimed he owed them money. In the second suit he asks for \$75,000 actual and \$10,000 punitive damages. He alleges that he had been a member of the Board of Trade, doing a commission grain business and earning \$17,500 a year, but that in March last he was suspended by the officers of the organization without just cause, and in consequence his income has been decreased and that he has been damaged to the amount named.

Arguments in the case of certain Kansas City elevator companies against J. W. Radford, chief inspector of Kansas, an action to set aside the Kansas law requiring the inspection and weighing by the state of grain going into private elevators, was made at Topeka on September 22. The immediate action is for an injunction. The attorney for the plaintiffs attacked the validity of the law passed in 1872, claiming that by mixing the classification of public and private elevators in the amendatory law passed in 1903 the classification established by the law in 1872 was invalid; that in consequence the law of 1872 itself was invalid. Two other reasons were put forth to establish the invalidity of the 1872 law—first that the construction of the title to the law was inaccurate, and secondly that two subject matters

were contained in the act. On the basis of each of these contentions Moore urged that the law of 1872 was clearly invalid.

Messrs. Cramp, Mitchell and Serrill, bankers, of Philadelphia, have entered action for \$38,360, against the Great Northern Elevator Company of Quebec, and the Great Northern Railway Company, which guarantees the bonds of the aforementioned company, and the Royal Trust Company, trustees of the bonds of the Elevator Company, the above sum being claimed for unpaid interest and sinking fund on bonds of the Elevator Company, held for them by the Royal Trust Company.

OBITUARY

Jacob H. Van Arnum, who was for years prominently identified with the seed trade of Toledo, Ohio, died October 7.

Samuel Born, one of the older grain dealers of Tippecanoe County, Ind., died at his home in Lafayette, on September 9, of paralysis.

Alexander W. Pond, formerly engaged in the grain business at Chicago, committed suicide by shooting himself at Boston, Mass., on September 28. His act was said to have been induced by ill health.

M. J. Considine, a member of the Chicago Board of Trade and a well-known hay and grain commission merchant of Chicago, died September 11. He came to this country from Ireland, County Wexford, in 1865. He was very prominent in church work in Chicago and is survived by a widow and five children.

Thomas Chambers, president of the grain commission firm of Chambers-Mackay Co. of Minneapolis, Minn., died at his home in that city October 4, from an illness which had extended over a year caused by a cerebral attack of an apoplectic nature. He is survived by a widow, three daughters and four sons.

Miles J. Betts, bookkeeper and expert accountant in the office of the Logan Grain Co. at Kansas City, Mo., committed suicide on October 5 by swallowing carbolic acid at his home. No cause is known for the deed except despondency over ill-health. He leaves a wife and girl of ten and a boy of eight years of age.

N. F. Peterson of Osceola, Neb., member of the grain firm of Peterson & Nelson, died September 30 after an illness of about two weeks. He was well known throughout the section in which he lived, and for a number of years was a member of the board of village trustees of Osceola. At the time of his death he was chairman of the board. He leaves a wife, six daughters and one son.

John H. Tomlin, head of the grain receiving firm of John H. Tomlin & Co. at Kansas City, Mo., died September 25, at 69 years of age. He was a well-known member of the Kansas City Board of Trade and served as a director from 1901 to 1904. He had formerly been in the grain business at Nebraska City, Neb., and had served several terms in the Nebraska state legislature. The Board of Trade of Kansas City adopted an appropriate set of resolutions of regret over his death. He is survived by a widow and four children.

John Butler of Minneapolis, Minn., died suddenly at Mankato on the night of September 22. He has been for years associated with the grain trade of the Central West and Northwest, and was at one time a member of the Chicago Board of Trade and later of the Minneapolis Chamber of Commerce. He was at one time associated with John Cudahy in the ownership of a large line of elevators which they operated throughout the West. In early days he was a resident of Ellsworth, Minn., and was a large owner of real estate in that place. He is survived by a widow, six sons and two daughters.

John G. Heindol, an old and highly respected grain merchant of Buffalo, N. Y., died at his home in that city September 24. His death resulted from internal injuries which he received in an accident in an elevator in the Chamber of Commerce Building, which occurred a few weeks ago. He was born in Germany and came to this country with his parents when he was but five years of age. He served in the Civil War with the 187th N. Y. Volunteers, and shortly after that engaged in the grain business in Buffalo, which he continued up to the time of his death. He was 60 years of age. A wife and two children survive him.

The C. P. Ry. made a new record at Winnipeg on September 23 by delivering at that point 519,000 bushels of wheat and 9,000 of other grains.

BARLEY AND MALT

The Niagara Malting Co., Buffalo, N. Y., will erect a pneumatic malt house from plans by J. F. Dornfeld, which will be 58x64.4 feet on the ground and 70 feet high, and cost \$150,000.

The Rice Malt and Grain Co., Chicago, has executed a trust deed for \$400,000, at 6 per cent, the mortgage being on the elevator property at North Forty-sixth Avenue and Cortland Street.

Secretary M. H. Potter, of the Wisconsin Grain Dealers' Association, has sent out to members type samples of new barley grades, with quotations showing the relative values of each grade.

John Noth, lately manager of the Continental Malt Co., Chicago, has resigned that position to become secretary of the United States Maltsters' Association, 503 Traders' Building. He will, in connection with his new office, conduct a strictly commission brokerage business in malt.

Barley in Olmsted County, one of the great barley districts of Minnesota, is a disappointment this year, and farmers are beginning to suspect that grain grown year after year on the same ground, and without change of seed, is sure to be a failure.

The Columbia County Barley Growers' Association has been organized at Dayton, Wash., representing farmers who have pooled 160,000 sacks of barley. The grain buyers and exporters have been offering but 75 cents per cental, and 6.5 to 7 cents for second-hand sacks, both of which the farmers refuse to accept.

The Lake Shore Malting Co., Syracuse, N. Y., has been forced into the bankruptcy court by the American Malting Co., judgment creditor for \$32,974. The Lake Shore Company was incorporated on September 28, 1900, with a capital stock of \$250,000. The company's condition on February 14 showed liabilities \$140,000 and assets \$714,656. Among the assets were shares of stock in two brewing companies, an ice company, a pottery company, a cold storage warehouse and in two newspapers. Herman Bartels is president of the company.

GERMINATION OF STORED BARLEY.

It is an interesting and important fact that barley shows a better germinating power some time after harvest than soon after. Practical malters also know by experience that a freshly harvested barley, especially in unfavorable years (i. e., unfavorable particularly in regard to complete ripening on account of combined bad weather), germinates poorly, but that its germinative power is materially improved by prolonged storage, combined with plenty of turning and aeration. Numerous tests in the laboratory as well as in practical work have also shown that this improvement in germinative power can be obtained in a short time by simply drying the barley at medium temperatures instead of by longer storage.

The causes of this phenomenon are not clearly known. The commonplace expression: "Barley must sweat," suggested the supposition to a German investigator that a loss of water was the determining element in the improvement of the germinative power. His tests, however, proved to him that storage without abstraction of water also acts favorably upon the germinative power.

It, therefore, would appear that the fact is due to some chemical influence developed in the "after ripening." These it is not necessary to go into here; but the fact itself is of much importance in its bearing on the handling of the grain after harvest.

STORING MALT.

Brewers who make their own malt are frequently somewhat careless with regard to the storing of it. Improper storage, and the use of malts varying largely in age, will result in material which is not uniform in quality—slack malt, resulting in a thin, gray, unsound beer which is liable to fret, says the London Brewing Trade Review. With properly constructed bins, lined with sheet iron or zinc, a little care and forethought in the filling and emptying will make all the difference between a sound uniform malt and one which is not so.

Bins should be filled in such a manner that they may be used from in rotation, the oldest first. We have seen some malting bins so constructed that the way into one bin was through another; and if the latter was filled last, the malt in the first could not be got until the second was emptied. Again, a bin should never be partly emptied and then filled up again with fresh hot malt. The result of doing this continually is that as the moisture distills from the warmer portion and condenses in the colder the malt in the far corners gets slack very

quickly. In fact, an instance of this came before our notice some time ago, some malt containing over 6 per cent of moisture, although only about four months old; and the reason of this was traced to the above cause. To get the best results, bins should be filled as quickly as possible, closed up, and used in rotation.

ALGERIAN BARLEY.

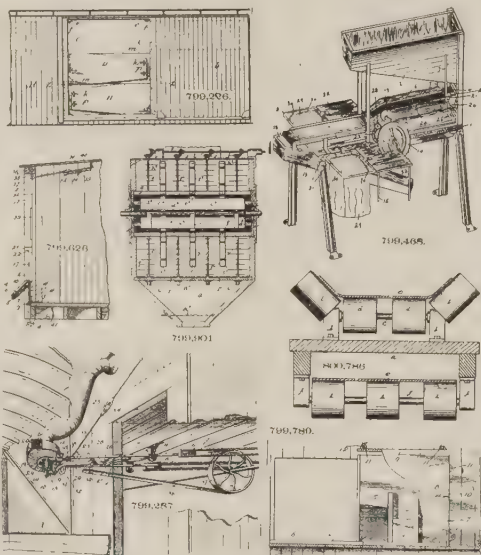
In Algeria barley forms a large part of the food of the native population and is also almost the only grain fed to the domestic animals. The production is about 30,000,000 bushels annually, of which about one-eighth is exported, mainly to France and England.

Algerian barleys are much esteemed by European brewers, but more on account of their cheapness than of their real quality, says Bulletin No. 80, Bureau of Plant Industry, U. S. Department of Agriculture. The improved barleys do not do well in Algeria as a rule, although some European two-rowed varieties seem to do well in places.

LATE PATENTS

Issued on September 12, 1905.

Grain Door.—Alexander B. Dickie, Brandon, Canada. Filed May 2, 1905. No. 799,226. See cut.
Car Loader for Grain Cars.—August A. Yacker,



Roberts, Ill. Filed September 13, 1904. No. 799,287. See cut.

Bean Sorting Machine.—John J. Jungers, Wethersfield, N. Y. Filed March 21, 1904. No. 799,468. See cut.

Issued on September 19, 1905.

Grain Door.—John W. Boling, Kansas City, Mo. Filed May 11, 1905. No. 799,626. See cut.

Grain Door for Cars.—Samuel R. Helck, Grayville, Ill. Filed November 19, 1904. No. 799,789. See cut.

Grain Drying Apparatus.—Alexander R. Hagner, Hagerstown, Md. Filed November 21, 1904. No. 799,901. See cut.

Issued on September 26, 1905.

Machine for Bagging and Weighing Grain.—James B. Williams, Minden, La. Filed October 15, 1904. No. 800,347.

Issued on October 3, 1905.

Belt Conveyor Mechanism.—William E. Bee, Detroit, Mich. Filed October 31, 1904. No. 800,786. See cut.

The Chicago Wide Tire Association held its annual meeting October 13.

What an export demand does, was shown in the relative receipts of oats and wheat at seaboard today. Because oats are going abroad New York, Boston and Philadelphia got a total of 716,580 bushels, and because wheat is not being exported the total receipts there were 55,155 bushels.—Pope & Eckhardt Co., October 3.

On September 25 an alfalfa and corn special train left Louisville for a tour of Kentucky covering eight working days. Joseph E. Wing of Ohio was the lecturer on alfalfa and P. G. Holden of Iowa on corn. Some 90 stops were made by the train and a large amount of literature on both alfalfa and corn distributed.

TRANSPORTATION

Vessel owners at Fort William on September 25 increased rates to Georgian Bay ports from 1½ to 2 cents per bushel, and shippers have since bid as high as 3 cents.

Recent advances in ocean and Gulf rates out of New Orleans have been unprecedented, grain rates having advanced 100 per cent, chiefly for future tonnage, however. October rates are easy.

The project of creating a water service from Minneapolis and St. Paul to New Orleans has been revived by Pittsburg people, who say they mean to build ten steel grain and flour boats for the route.

The attorney for the Kansas Railroad Commission has filed complaints against the U. P., Rock Island, Santa Fe and Mo. Pac. roads, alleging that their grain rates are exorbitant, unjust and discriminative.

The Great Northern has put into service a number of monster engines, which weigh 318,000 pounds and are capable of moving more than a hundred loaded cars in one haul, although that number of wheat cars will be the limit of a train haul.

The rates from Omaha and Kansas City to Minneapolis and the Gulf have been equalized in a new tariff, in effect October 1. This gives Omaha a cent and a half advantage on Minneapolis, while Kansas City will have a cent and a half on grain for the Gulf.

The Illinois Central Railroad has made new rates on grain, effective Monday morning, October 2, from stations on the Cherokee division as far west as LeMars. New rates are also in effect from Sioux Falls and Onawa, and along the lines of the two branches.

The Colorado & Southern R. R. Co. is said to be planning an extension of the Cheyenne & Northern to a point on the Canadian-Montana border to be joined there by a branch of the Canadian Pacific. This would give the Colorado & Southern a straight line from the Canadian wheat fields to the Gulf of Mexico.

It is expected that 20,000,000 bushels of wheat will be offered for export from Pacific Coast ports. At the average size, it will take at least 200 ships to carry the grain to Europe, but up to the middle of September the list of vessels in port was numbered less than fifty, and some of these may not arrive until January. Sail space was then offered at \$6.60 per ton.

The C. & E. I. Railroad will hereafter cancel reconsigning charges on all grain arriving at Chicago, whether on through or local billing, and after inspection is ordered to Eastern lines on through billing. The same road has removed the discrimination of 1 cent in rates on grain going by junction points against the Chicago route, and granted free delivery by that road to Rock Island elevators.

New uniform rules of the Central Freight Association for reconsigning and transferring grain shipments are now in force and effective in Toledo. Under the new order reconsigning and transfers come under the jurisdiction of the inspection bureau of the Central Freight Association, in charge of Inspector L. K. Tappan, who has moved his office to the Produce Exchange and has added a number of clerks to his office force.

SAVING SEED CORN.

Hon. John Cownie of Iowa, in advising farmers of that state to select their seed corn early in the fall (specifically before October 15), says:

"Seed corn selected before the middle of October and properly cared for will, when planted at the same time, get a start of a week or ten days over seed corn of weak vitality selected in the spring from a corn crib. The latter may germinate fairly well with favorable conditions, even although weak in vitality, but the seed corn saved in the fall will germinate in the field in any kind of weather we have in Iowa from and after the middle of April for the last fifty years. I know whereof I write, for I have planted corn, selected early in the fall preceding, in the latter part of March to test it, and never yet found it to fail under the most adverse conditions.

"The choicest ears to be found should be selected for seed; if part of the husks are left on the cob two ears can be tied together and hung over a wire or beam, or the ears may be placed on racks, but the best place to be found on a farm for saving seed corn is in a room or attic with an open register over the kitchen stove, where of necessity there is fire every day. Seed corn should never feel frost. It should be kept warm and dry, with sufficient ventilation of dry

air to prevent molding, from the time it is gathered until the planting season.

"Three or four times as much corn as will be required for seed should be selected before the middle of October and, after being kept as indicated all winter, it should be carefully sorted in the spring, any moldy or improper ears rejected, point and tip kernels removed by hand, and only the full, even and uniform sized kernels shelled for seed.

"If these suggestions are followed by every farmer in Iowa, no spring testing will be needed, 100 per cent germination will be assured, followed by a strong, vigorous and rapid growth, no replanting on account of poor seed will be necessary, a full, even and uniform stand will be assured, and a strong, healthy growth will be the result, from 50 to 100 million bushels of corn will be added every year to the corn crop of Iowa, there will be no cause for worry in regard to poor seed corn in the spring, no necessity for the farmer to drop upon his knees in the cornfield in an attitude of devotion while he scratches with his fingers for the kernels that failed to grow and his thoughts are far from what would be indicated by his position on his bent knees."

These suggestions should be advertised everywhere in the corn belt by grain dealers.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

W. D. Hess, Edinburg, Ind.
A. C. Harker, Dunkirk, Ohio.
I. W. Byers, Iron River, Wis.
A. B. Shaub, Louisville, Ohio.
J. L. Hisey, Muskegon, Mich.
F. A. McKenzie, Quincy, Mich.
W. V. Chambers, Beatrice, Neb.
E. H. Hoaglin, Wild Rose, Wis.
A. C. Barbeau, of the S. Howes Co., Silver Creek, N. Y.
W. L. Taylor, president Taylor Grain Co., Topeka, Kan.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

GRAIN AND SEEDS

FEED FOR SALE.

Alfalfa meal for horses, cows and hogs, \$12 per ton; fine and extra green, \$14 per ton, f. o. b.

WISE ELEVATOR, Canfield, Colo.

ELEVATORS

ELEVATORS FOR SALE.

In the corn belt of Illinois and Indiana. Bargains if taken at once. Address

JAMES M. MAGUIRE, Campus, Ill.

FOR SALE.

A 15,000-bushel elevator with large feed grinding and coal business in connection. Will pay to investigate.

CALLAGHAN & GRANGER, Rochester, Minn.

FOR SALE.

Four modern elevators in Minnesota, on the Omaha Railway. Good territory and in first-class condition. Address

MINNESOTA, Box 9, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE.

A half interest in a 150-barrel Great Western mill and elevator—detached. Located in the center of the wheat belt in Kansas. For description and price address

W. M. CHELF, Geneseo, Kan.

FOR SALE.

Elevator on Erie Railroad in good grain country, 14,000 bushels' capacity; 20-horsepower gasoline engine; feed mill; corn sheller; Monarch Separator; all in good condition. Address

ROBERT KOLTER, Spencerville, Ohio.

FOR SALE.

Elevator, flour and coal business, at one of the best stations in northeastern Kansas, on the Rock Island Railroad. Elevator 40,000 bushels' capacity, equipped with good machinery; hopper scale; everything in first-class condition. Price, \$10,000. Address

BOX 21, Bern, Kan.

TWO NEW ELEVATORS.

For sale. Fifteen and twelve thousand capacity, coal sheds, corn cribs, telephone line, one and a half acres ground; also lease of another elevator. Crops good. Will handle 300 cars. Price \$6,000. My reason for selling, other business. If you want a snap, address

H. J. SAHS, Charles City, Iowa.

FOR SALE.

Elevator in the corn and oat belt of Iowa. Cribbed house, capacity 80,000 bushels; good cribs for 20,000 bushels ear corn; 5 acres of land. Also handles coal, feed, tile and all building material except lumber. Big crop to handle this year. Price, \$12,000. Doing a profitable business. Reason for selling, poor health. Address

IOWA, Box 9, care "American Elevator and Grain Trade," Chicago, Ill.

MACHINERY

INVESTIGATE THIS.

Cheapest power on earth. Write for particulars. H. W. TUTTLE, 153 South Desplaines Street, Chicago.

FOR SALE.

Seed cleaning machine, large Invincible Seed Cleaner, 35 screens, sufficient for grain and seeds of all kinds. In good condition, and to make room for some changes will offer it at a bargain. Let us hear from you.

A. A. BERRY SEED CO., Box 114, Clarinda, Iowa.

FOR SALE.

The Interstate Elevator Co. having decided to equip their Erie Elevator at Chicago with electric power, we offer for sale their steam plant as follows:

Three vertical 125-horsepower Manning Boilers. One self-supporting steel stack, 5 feet diameter, 125 feet high.

One pair 16½x27-inch Automatic Buckeye Engines.

Two boiler feed pumps.

One feed water heater.

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One K. W. 115-volt generator, direct connected to Ideal Automatic Engine.

There is also a line shaft about 120 feet long, running from 5 15-16 in. to 3 15-16 in., together with a large number of bracket post hangers, rope drives, complete to clippers and separators; also one large car puller, capable of pulling twenty loaded cars.

The machinery is all in first-class condition, having been run only six years; rope transmission, shafting, etc., made by Webster Mfg. Co., Chicago. Address

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Gasoline engines; one 54-horse Fairbanks-Morse; one 28, one 16, one 12, 2, 8 and 25 horsepower Sterling Charter. All sizes and prices in small sizes.

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Miscellaneous & Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

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Ship us your next consignment of hay and straw.

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This mill is in first-class order and repair.

It is now in satisfactory and profitable operation.

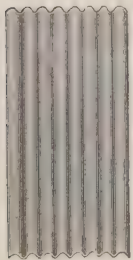
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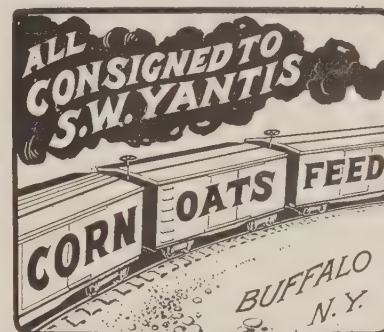
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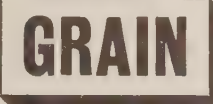
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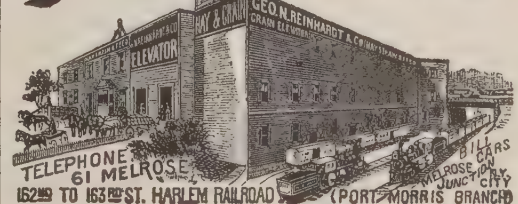
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So far this year, that Company has had less than \$5,000 losses on the 750 elevators making self-inspections. It makes a large saving to the policyholders. For particulars write

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It has been in business 27 years and its average annual cost for insurance to mutual policyholders has been about one-half of the board rates of stock companies.

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Good, but cheap, insurance on Elevators,
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AND
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Insurance on Elevators and Grain!

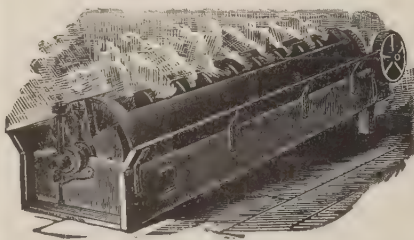
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Automatic in operation, requiring no attention. Double
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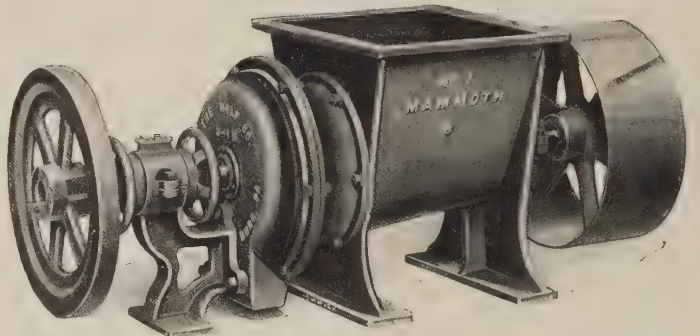
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The market is always for the best goods at the best prices, and although such considerations as personality and sentiment and long continued dealings with the same house are at times influential, the buyer who has an eye single to his own financial welfare will buy those goods which appeal to him as the greatest money's worth.

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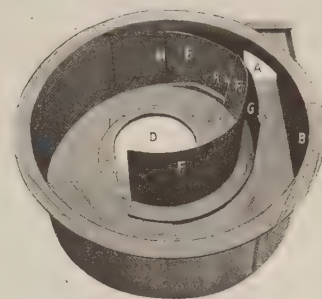


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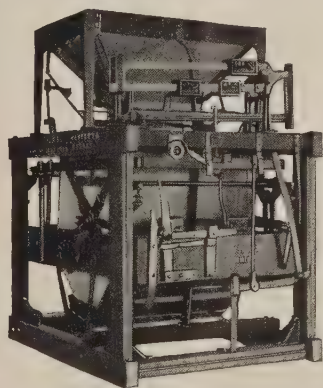
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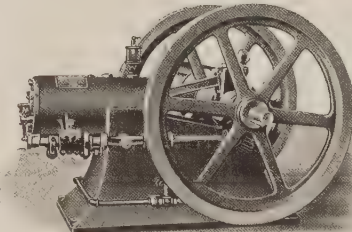
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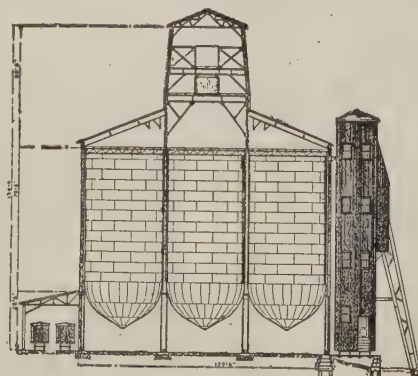
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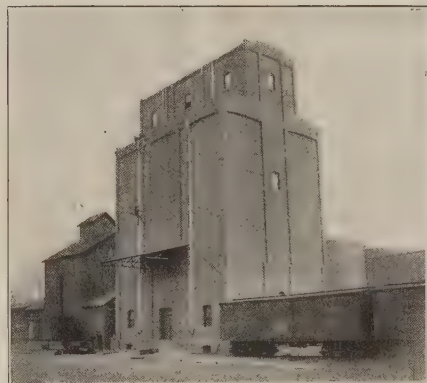
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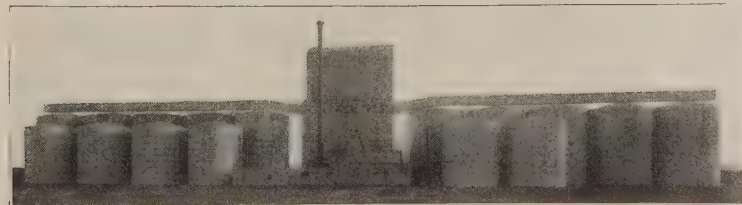
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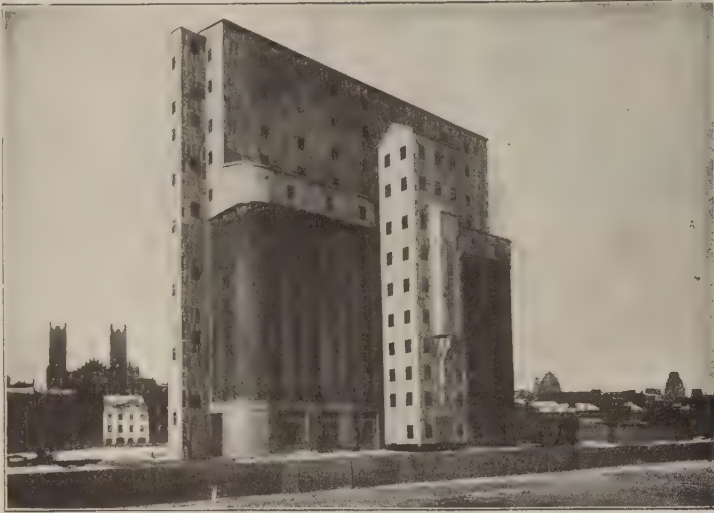
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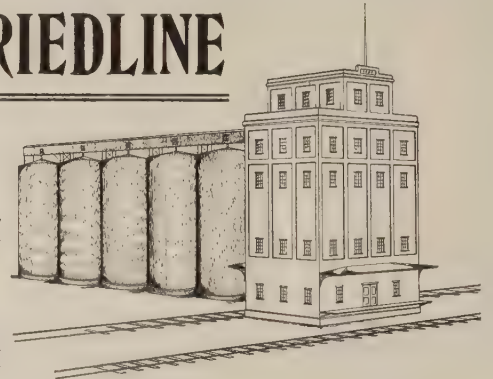
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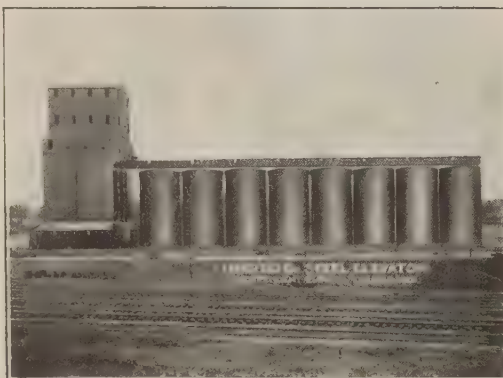
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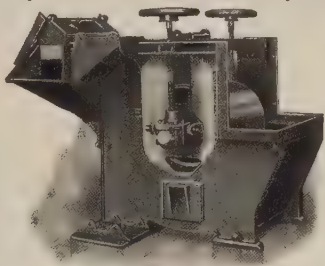
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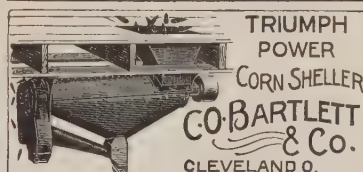
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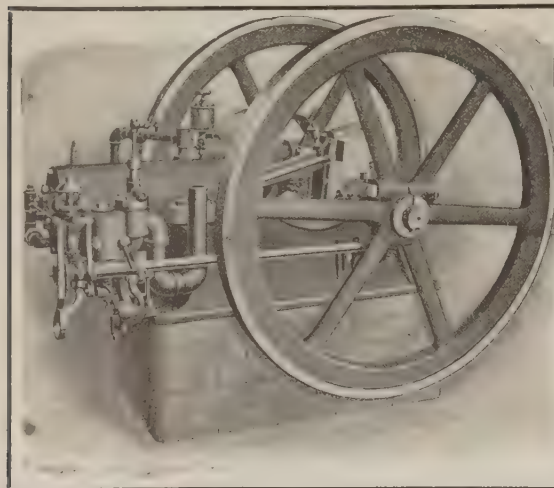
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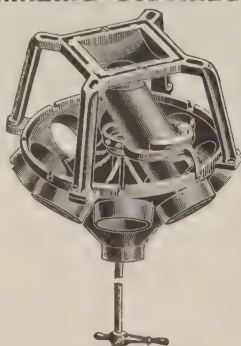
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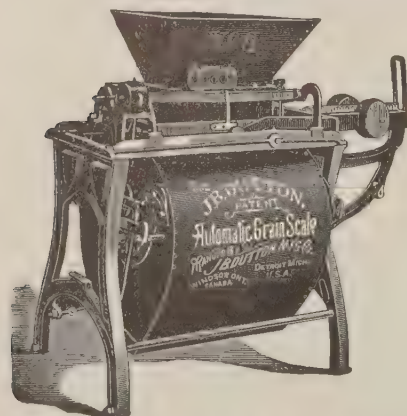
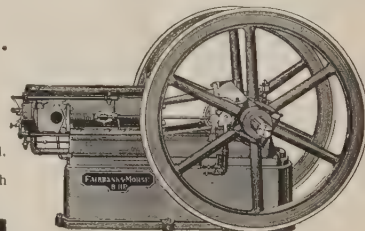
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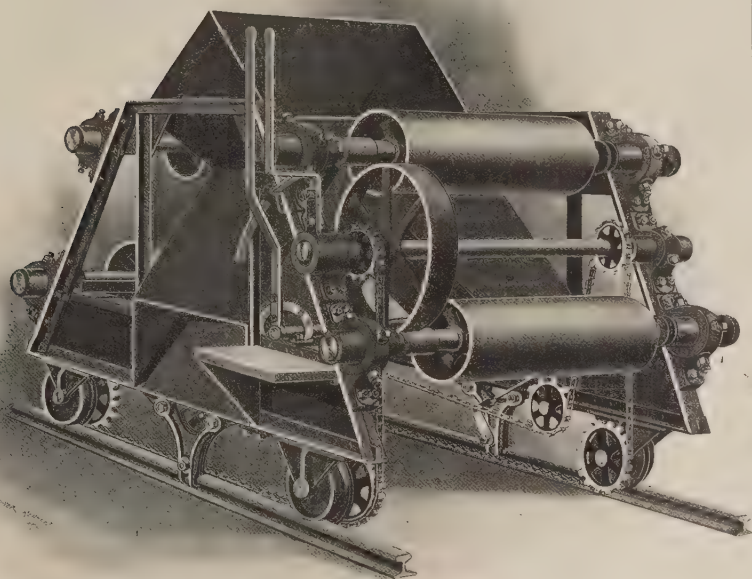
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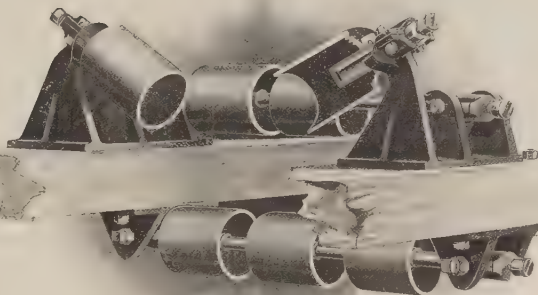
Modern Grain Elevator Machinery



IMPROVED STEEL FRAME REVERSIBLE SELF-PROPELLING TRIPPER

We manufacture a full line of Trippers, Belt Conveyor Appliances, Power Shovels, Car Pul-
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Machinery buyers will do well to write us.



IMPROVED DUSTPROOF CONCENTRATING AND RETURN ROLLERS

Largest Manufacturers of Grain Elevator Machinery West of the Mississippi

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*Makes Money
Saves Money*

*Necessary to all up-to-date
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USED EVERYWHERE

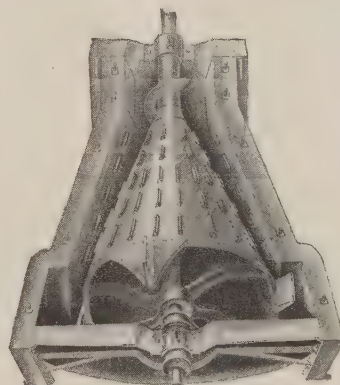
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INTERIOR VIEW OF The United States Corn Sheller

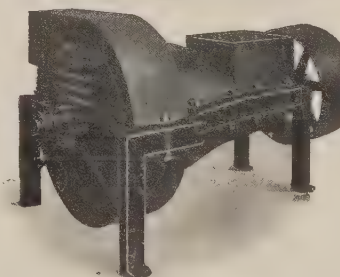


Patented

See for yourself how it is constructed, making it the cheapest sheller you can buy. Blades don't crack corn, but deliver the corn, cob, silks and shucks in a most satisfactory way, right and left hand over, or same from underneath, thus avoiding a cross drive belt.

Stand at the Hopper End when deciding which you want, and state whether pulley is to be on hopper or drum end. This interior view is from our largest size; guaranteed 1,500 bushels per hour. Quick shipment of any size desired.

The B. S. C. Pat. Chain Drag is the only satisfactory Feeder.



Our Water Tight Boot

which can be sunk into the ground to a depth of 18 inches, is the proper elevator boot to work with our Sheller and Chain Feeder. Yes, and don't forget our Safety Wagon Dumps when planning your elevators.

Complete equipments at lowest prices for first-class machinery.

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BLOOMINGTON, ILL.

Correct Weights

The Bowlus Automatic Weighing Machine will weigh out your grain accurately to the pound, and will dump and register the weight without the services of a weighman. It works automatically and can be adjusted to dump at any weight. Its salient features are

Accuracy
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Durability

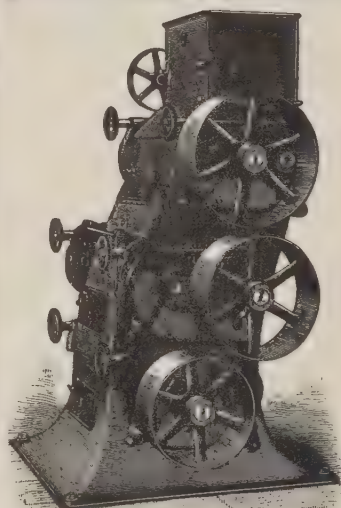
Machine to weigh out 60,000 pounds of any grain per hour goes in space 7 feet. high by 4 feet square.

Write for catalog and detailed description

The Bowlus Automatic Scale Co.
Springfield, Ohio, U. S. A.



SIDE VIEW



3-PAIR-HIGH, SIX-ROLLER MILL.

CUSTOM WORK!

UTILIZE YOUR POWER
BY OPERATING A GOOD MILL FOR GRINDING

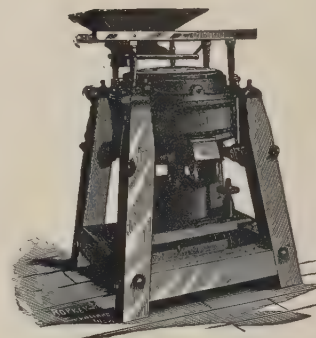
...FEED AND MEAL...
— IT PAYS —

WE MANUFACTURE
THREE-ROLL, TWO-BREAK MILLS, 2 Sizes.
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TWO-PAIR HIGH, FOUR-ROLLER MILLS, 5 Sizes,

...And...

PORTABLE FRENCH BUHR MILLS,
85 Sizes and Styles.

SEND FOR BOOK ON MILLS.



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UNDER RUNNERS,
UPPER RUNNERS,
PULLEY AND GEAR DRIVES.

ELEVATOR SUPPLIES AND POWER CONNECTIONS.

ROPE DRIVES, GEARING, CORN SHELLERS and CLEANERS, GRAIN CLEANERS.

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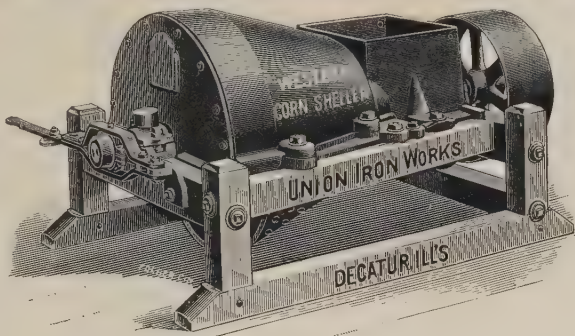
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We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our 3½x3 inch, list price 9c., has as much capacity as others 3½x3½ inch, list price 10c. Our prices are right.

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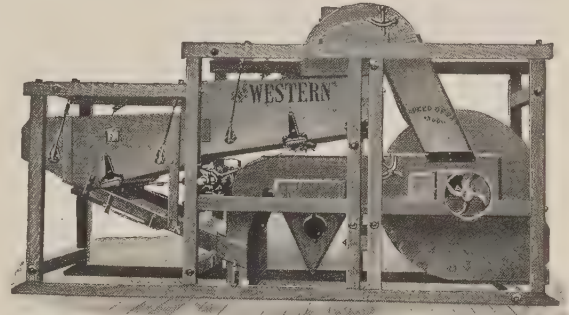
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— IF SO, EQUIP IT WITH —

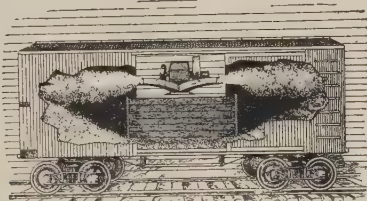
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Plans furnished
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"Western" Shaker Cleaner

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Is a necessary part of the equip-
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installation means a positive sav-
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you why you cannot afford to use
any other loader.

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FILLED FIRE BUCKETS

The use of CALCIUM CHLORIDE SOLUTION in place of SALT
BRINE has these advantages:

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The Solvay Process Co.'s CALCIUM CHLORIDE is the best, its
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It is the best water jacket solution for gasoline engines.

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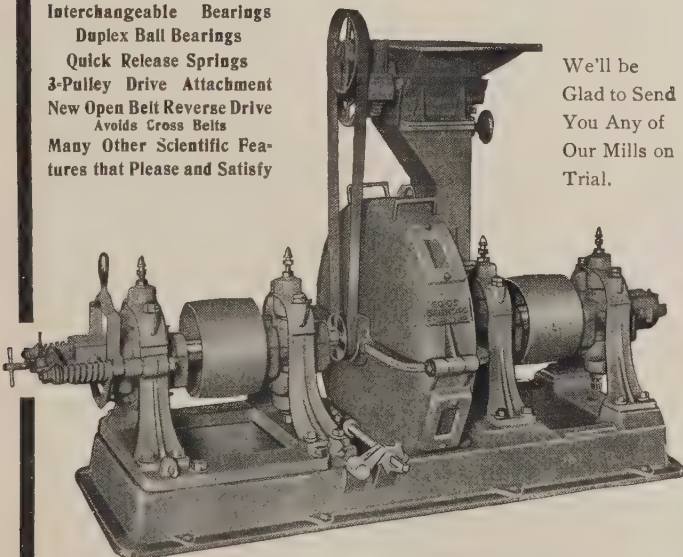
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Exclusive Features

Interchangeable Bearings
Duplex Ball Bearings
Quick Release Springs
3-Pulley Drive Attachment
New Open Belt Reverse Drive
Avoids Cross Belts
Many Other Scientific Fea-
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We'll be
Glad to Send
You Any of
Our Mills on
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A Live Member of That Vigorous "Best on Earth" Family

Grinds Ear Corn, Chop Feed, Bran, Offal and all
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Fast, Fine Grinding

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Machine = Molded Gears

We manufacture a very complete line of Gears 1-inch pitch and larger; they are noted for their strength, durability, true rims, accurate pitch and smooth running. Hence they are highly efficient and economical. If you use gears you should have our Catalogue No. 27.

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ELEVATOR-FACTS

"Rubber belting taken up twelve (12) times
LEVIATHAN TWICE"

SEND FOR "FACTS."

MAIN BELTING COMPANY

Philadelphia, Boston
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MACHINERY, BELTING, SUPPLIES

We will fit you out promptly and at right prices.
Good goods and square treatment. Try us.

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Eurekas Again Victorious

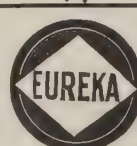
The S. Howes Company "Eureka"
Machinery to be Used Exclusively
in the Largest Mill Ever Built
in America

After the most thorough investigation of the merits of all makes of Grain Cleaners, The Hecker-Jones-Jewell Milling Co., of New York City, awarded their contract to the **S. HOWES COMPANY**, Silver Creek, N. Y., for a complete and unbroken line of "EUREKA" Receiving and Milling Separators, Scourers, Washers, Dryers and Conditioners, and their Flour, Bran, Feed and Package Packers, for the new 10,000-barrel mill.

This is the largest individual contract ever given for this class of machinery and attests to the superiority of the "Eureka" machines.

Points of merit when carefully investigated result in ordering "EUREKAS." Our 1905 Grain Cleaner Catalogue is the most complete ever published. Ask for it.

THE S. HOWES COMPANY
"Eureka" Works SILVER CREEK, N. Y.



ELWOOD'S GRAIN TABLES

Show the value of any number of bushels or pounds of
WHEAT, RYE, OATS, CORN OR BARLEY
at any given price from 10 cents to \$2.00 per bushel.
One of the most useful books ever offered to millers.
Indorsed by prominent millers and grain dealers.
Bound in cloth, 200 pages. Mailed on receipt of price.
—\$1.25—

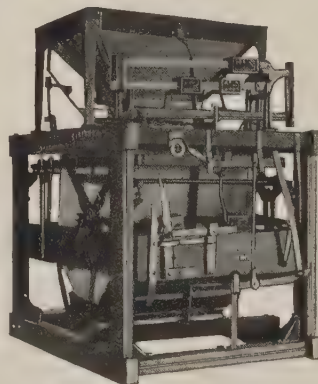
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A short practical talk on
good paint and good painting
for steel work, metal
and wood. Write for a
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Address PAINT DEPARTMENT,

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.



HAS NO EQUAL

The McLeod Automatic Grain Scale

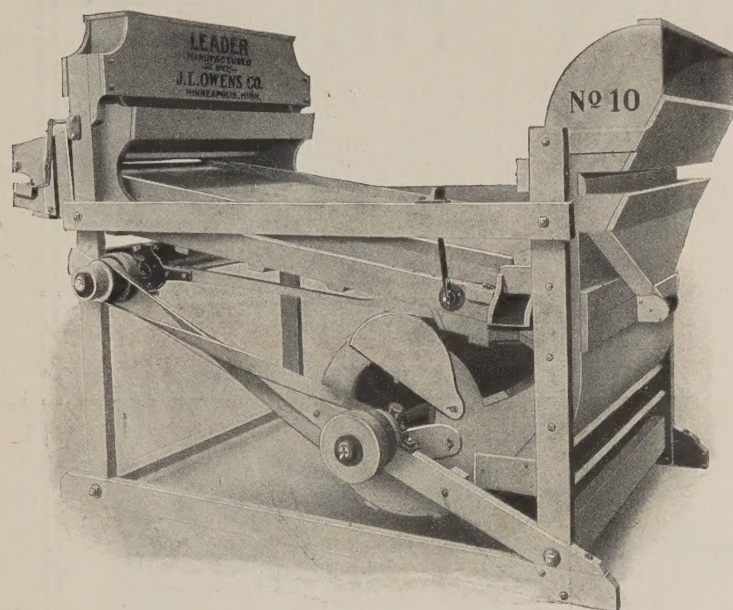
Weights grain accurately while running into cars, bins or sacks.

Weights recorded. Reliable and durable. Prices reasonable. Sold on approval. You cannot buy a better scale at any price. Write for particulars.

McLeod Bros., Marietta, Kan.

SOMETHING DOING

When Cleaning Either Grain or Flax with an Owen's Combination Flax and Grain Cleaner



Write for Complete Catalogue

NEW "LEADER"

This is without exception the most perfect and efficient **General Purpose** machine made for an Elevator or Warehouse where space or power will not permit a larger machine, or where the services of a larger machine are not required.

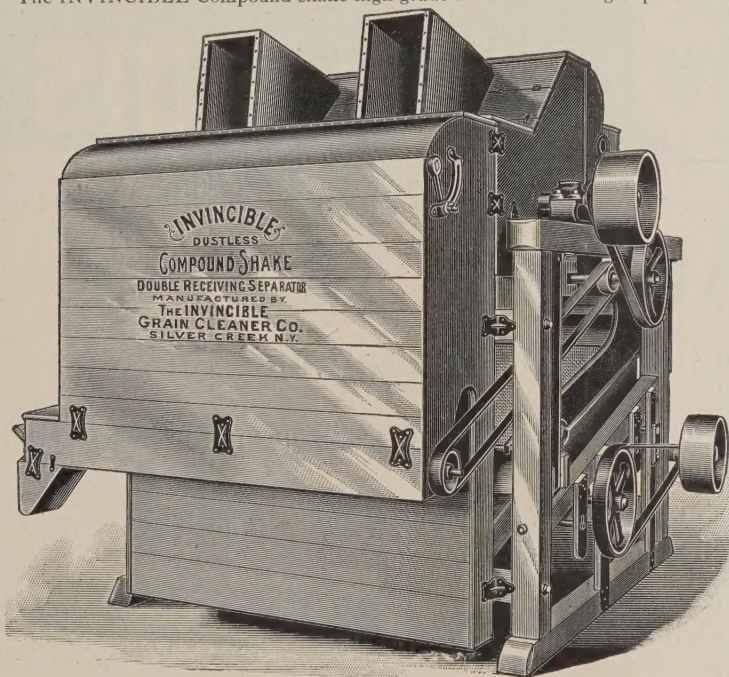
Note carefully the following features which are embodied in this machine:

1. **Twin Cone Eccentric.** With this we can produce a long throw for flax cleaning, and a short throw for grain cleaning. The adjustable eccentrics are very essential in a machine which is required to clean both Flax and Grain.
2. **Loose Sieve Frame,** which is allowed to pound automatically against a heavy sill at each end to keep the sieves free from clogging. **This saves one man's time.**
3. **Scalper,** which takes out all the coarse screenings before the grain or flax gets onto the sieves, leaving nothing for the sieves to handle but the finer screenings.
4. **Force Feed,** which avoids clogging and insures an even feed, which is very necessary.
5. **Vertical Blast,** which is an excellent feature, and is controlled perfectly by means of cone pulleys and blinds at each end of the drum.
6. **Space Economy.** This machine is constructed in such a way that it need be but a trifle longer than the sieves, as in scalping the grain passes in one direction, and in screening it passes in the opposite direction; and as the sieves extend underneath the scalper it cuts out considerable of the length. **Note carefully that the sieves are put in and taken out over the top of the frame,** consequently all the floor space needed is what is required to get around the machine.

J. L. OWENS CO., 615 SUPERIOR ST. S. E. MINNEAPOLIS, MINN.

GET THE BEST

The INVINCIBLE Compound shake HIGH-GRADE Separators.
No shake, no tremble, run perfectly steady. Can be placed anywhere in the elevator.
The INVINCIBLE Compound shake high-grade Double Receiving Separator.

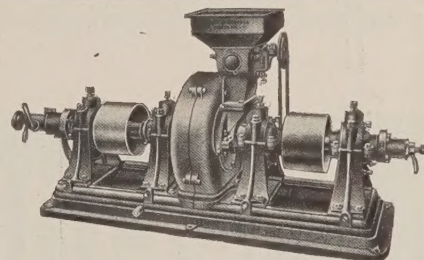


INVINCIBLE GRAIN CLEANER COMPANY
SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

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Edward A. Ordway, 612 Exchange Bldg., Kansas City, Mo.
Chas. H. Scott, 307 So. 3d Street, Minneapolis, Minn.
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First In Its
Field



The Monarch Attrition Mill

Is sold on 30 days' trial, subject to a strong guarantee. This shows our faith in the mill and enables you to test it **AT OUR EXPENSE.** You may be sure that did we not know it to be the best feed grinder on the market we could not afford adopt this selling plan.

Can We Ship You a Monarch on This Guarantee?

We have sold hundreds of Monarchs on this basis, and all of them are giving satisfaction. We have a great many testimonials like the following:

"The 20-inch Monarch Attrition Mill you put in for us is giving perfect satisfaction and does all you claim for it. It beats anything we ever used for grinding cob meal, and we have nothing but good to say for the mill, and also for your manner of treating your customers.—LANSON BROS., Tionesta, Pa."

Our catalogue No. 9 is a book that you should have if you are interested in feed grinding. It describes the Monarch and explains why it has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable three-pulley drive; hammered steel shafting; ball bearings and other features not found in competing mills.

SEND FOR A COPY—IT'S FREE

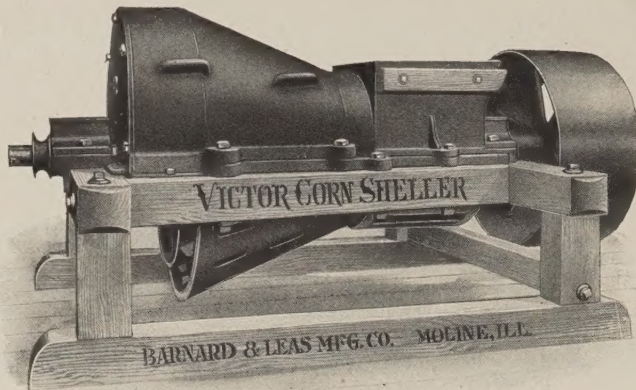
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Northwestern Branch:
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Barnard & Leas Mfg. Co.

THE VICTOR CORN SHELLER



The Standard Sheller of the country.
More of them in use than any other make.
Has no equal for durability, efficiency and capacity.

Just the machine to handle your large crop.

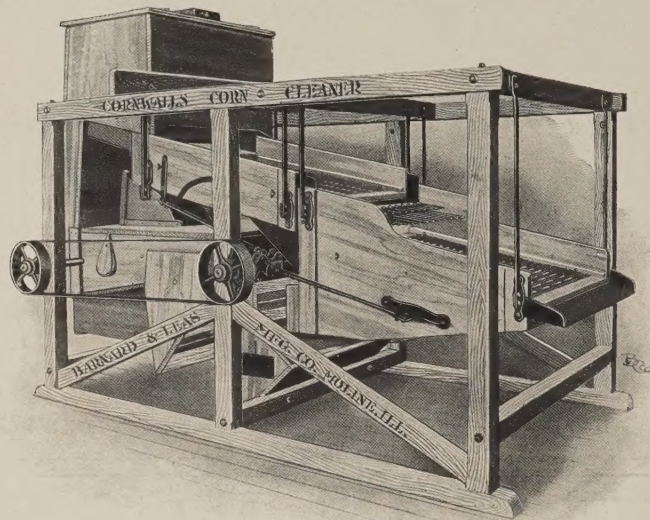
The Cornwall Corn Cleaner

The machine best suited to clean your corn after it is shelled.

Its patent finger sieve will not clog, and will remove the small cob ends and pieces of cob always present in corn cleaned by other machines.

We also make other Cleaners and a full line of Shellers, while we furnish everything in the elevator line.

Send for our latest circular.



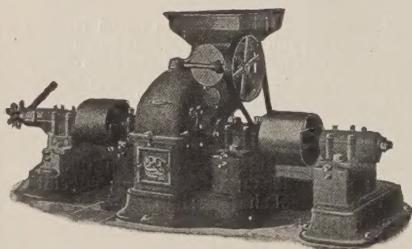
MOLINE



ILLINOIS

The Unique Attrition Mill

FULL MEASURE IS THE TRADE MARK OF THE UNIQUE



Full measure as to capacity for size of mill, quality of work and beauty of design and finish.

The full measure of satisfaction which users derive from it is a certain guarantee of its perfection in every detail.

The feed grinding season is again here and if you want a machine adapted to your needs and one as near perfect as human ingenuity can make it, order the Unique.

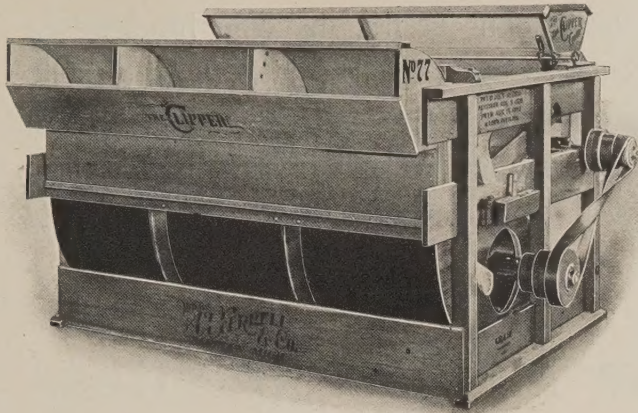
Further Particulars on Application

Robinson Manufacturing Co.

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MUNCY, PA.

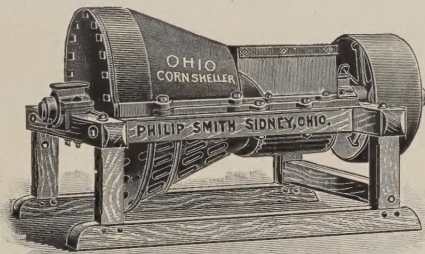
SAFE INVESTMENTS



If you are looking for a chance to invest your money where it will bring the largest returns, buy a "CLIPPER" Cleaner. The returns on this investment are in the form of lessened cost of maintenance—both in the amount of power required to operate the machine and the time and attention necessary to keep it in perfect running order. ∴ The machine shown in

this cut is especially adapted to handling wheat, oats, rye and barley and all coarse grain in large quantities, and it will require not to exceed three horsepower. It has triple air drum, insuring uniform air separations. This machine is a winner and cannot fail to give satisfaction. Write for further information and catalog.

A.T. FERRELL & CO., SAGINAW, W.S., MICH.



Corn Shellers

Corn Cleaners

Drags, Dumps, Etc.

When you want any machinery or supplies for your elevator, write us for prices ∴ ∴ ∴

THE PHILIP SMITH CO.
SIDNEY, OHIO

THE WEST LEADS IN EVERYTHING

Western people are continually working to make things "just a little bit better." They hustle day in and day out, keeping their business methods strictly up to date. That's why they keep ahead.

For more than thirty years it has been our policy to build and equip grain elevators, "a whole lot better" than the other fellow, and we have done it. That's why we have so many satisfied patrons. Are you one? If not, get in line to-day by sending us your specifications.

GREAT WESTERN MFG. CO.

LEAVENWORTH, KANSAS

CALCIUM CHLORIDE

Anti-Freezing Solution

For Gasoline Engines and Fire Barrels

Absolutely **neutral**. Will **not rust**. Has **no effect on metal** of any kind. Freezing point **54 degrees below zero**. **Never precipitates** nor **evaporates**. You don't have to refill fire barrels. It's permanent.

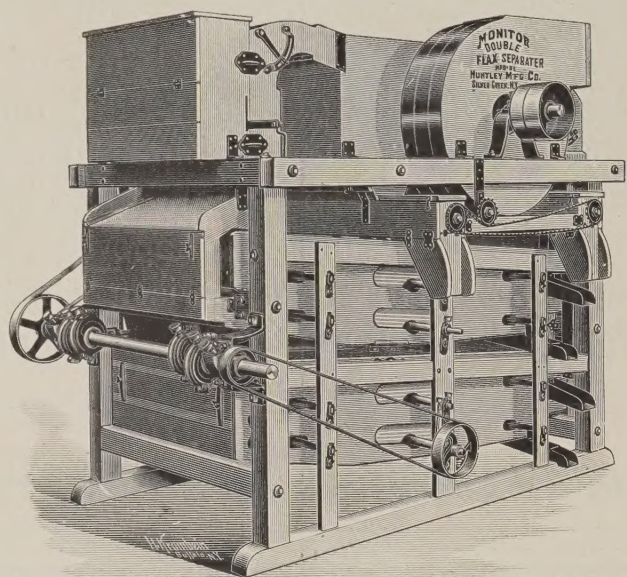
We give a SALOMETER FREE

to all our customers. Write us direct for prices and full information. We manufacture a special grade for gas engines.

James H. Rhodes & Co.
217 East Kinzie Street CHICAGO, ILL.

The Best Device for Cleaning Flax is Pictured Here

If you will stop a moment and do a little figuring on the amount of flax that you handled last season—about the average number of pounds of dockage per bushel of flax shipped, how much you got out of it and the amount of freight you paid on this—if you will do these things it will not take much argument on our part to convince you that the purchase of a MONITOR FLAX SEPARATOR will put good money in your pocket; will mean the saving of a goodly sum to you.



Examine This Cut of The Monitor Dustless Double Flax Separator Style A

This separator is two complete and separate machines in one frame, driven by one belt. Each machine is so complete that flax and wheat, or other grain, could be cleaned separately on the Separator at the same time.

Perfect Counterbalance

Steady Running

READ WHAT USERS SAY OF THEM

Blabon, N. D., May 31, 1904.
Huntley Mfg. Co., Silver Creek, N. Y.
Dear Sirs—In answer to your letter of the 19th inst., asking as to how we are pleased with your machine for cleaning flax, we would say that our buyer at Blabon advises us that for flax cleaning your machine is all that could be desired.
Respectfully,

BLABON FARMERS' ELEVATOR CO.,
By James D. Brown.

Minneapolis, Minn., May 24, 1904.
Huntley Mfg. Co., Silver Creek, N. Y.
Gentlemen—We have been using your Flax Cleaners at the different linseed oil mills we have been running for the past six years, and have not had an idle hour on their account in all that time, neither have we had any expense attached to them in the way of breakage. They are always ready to do their work and the capacity is unlimited.
We have used reels and various flax cleaners for the past fifteen years, and all of them are failures when compared to yours.
We wish to compliment you on how well your machine is balanced, as the knock and jar to most cleaners is enough to drive one out of business.
Very respectfully yours,

DANIELS LINSEED CO.

Lake Benton, Minn., May 23, 1904.
Huntley Mfg. Co., Silver Creek, N. Y.
Gentlemen—About nine months ago we put up a new elevator in connection with our mill, in which we installed one of your Monitor Double Flax Separators, which has given excellent satisfaction.
We had looked over the field of different makes of separators before buying and concluded that you had the best separator on the market to clean all kinds of grain and do perfect work. We are now satisfied that your machine comes as near being perfect as it can be.
Yours truly,

LAKE BENTON MILLING CO.

Sleepy Eye, Minn., May 21, 1904.
Huntley Mfg. Co., Silver Creek, N. Y.
Gentlemen—Your favor of the 19th inst. received. In reply will state that we have been using one of your Flax Cleaners in our cleaning house since 1901, and the same gives good satisfaction. We find that this machine will clean from 450 to 500 bushels per hour.
Yours truly,

SLEEPY EYE MILLING CO.

MONITOR FLAX SEPARATORS are furnished in five different styles. Send for our TREATISE ON FLAX CLEANING that tells all about them. A postal card will bring it.



HUNTLEY MFG. CO.

SILVER CREEK, N.Y. U.S.A.

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121 Front St., New York, N. Y., J. W. Perrine, Agent

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